THE BREAK AND BEND VERBS IN TSHIVENDA

BY

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DECLARATION

I, the undersigned, hereby declare that the work contained in this thesis is my own original work and that I have not previously in its entirety or in part submitted it at any University for a degree.

SIGNATURE DATE

ABSTRACT

The thesis is organized into five chapters: the first chapter deals with the aims of the study, the theoretical framework that has been assumed in this study as well as the organisation of the thesis. The second chapter gives an overview of the assumptions of lexical semantics with specific reference to the Generative Lexicon. Chapter 3 is concerned with the break verbs while chapter 4 deals with the bend verbs in Tshivenda. Chapter 5 gives the conclusions of the study.

With regard to the **break** verbs in Tshivenda: these verbs have been classified into seven subgroups with regard to specific semantic features. Syntactically, the break verbs in Tshivenda are mainly transitive verbs while a large group have a transitive-intransitive alternation with the suffixes [-l-/-w-]. The break verbs may also regularly appear with the iterative suffixes [Vkan-/Vkany-]. Most of the break verbs also regularly appear in two other alternations i.e. the possession alternation and the instrument-subject alternation.

The bend verbs in Tshivenda are organized into five subgroups with regard to their semantic features. All bend verbs in Tshivenda are transitive verbs, but it has been shown that these verbs are in reality ergative verbs which assign two internal theta-roles. These verbs also regularly appear in the possession alternation and the instrument-subject alternation.

Both the **break** and **bend** verbs have furthermore been treated within the main components of the **Generative** lexicon, i.e. argument structure, event structure, lexical conceptual paradigm and lexical inheritance structure.

OPSOMMING

Die verhandeling is verdeel in vyf hoofstukke: die eerste hoofstuk handel oor die doelstellings van die studie, die teoretiese raamwerk wat aanvaar is as uitgangspunt vir hierdie studie asook die organisasie van die verhandeling. Die tweede hoofstuk gee 'n oorsig oor die aannames van die leksikale semantiek met spesiale verwysing na die Generatiewe leksikon. Hoofstuk drie bestudeer die breek werkwoorde terwyl hoofstuk vier handel oor die buigwerkwoorde in Tshivenda. Hoofstuk vyf gee die konklusies van die studie.

Met betrekking tot die **breek** werkwoorde in Tshivenda: hierdie werkwoorde is geklassifiseer in sewe subgroepe met verwysing na spesifieke semantiese kenmerke. Sintakties is die breek werkwoorde in Tshivenda grotendeels transitiewe werkwoorde terwyl 'n groot groep deelneem aan 'n transitiewe-intransitiewe alternasie met die suffikse [-l-/-w-]. Die breek werkwoorde kan verder ook reëlmatig voorkom met die iteratiewe suffikse (Vkan-/Vkany-]. Meeste van die breek werkwoorde verskyn ook reëlmatig in twee ander alternasies nl. die possessiewe alternasie en die instrument-subjek alternasie.

Die **buig** werkwoorde in Tshivenda is verdeel in vyf subgroepe na aanleiding van hulle semantiese kenmerke. Alle buig werkwoorde in Tshivenda is transitiewe werkwoorde maar dit is aangetoon dat hierdie werkwoorde in werklikheid ergatiewe werkwoorde is wat twee interne theta-rolle toeken. Hierdie werkwoorde kom ook reëlmatig voor in die possessief alternasie en die instrument-subjek alternasie.

Beide die breek en buig werkwoorde is verder behandel binne die hoofkomponente van die Generatiewe leksikon, nl. Argument struktuur, gebeurtenis struktuur, leksikaal konseptuele paradigma en leksikaal erfenis struktuur.

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TABLE OF CONTENTS PAGE

CHAPTER 1

INTRODUCTION

1.1. AIM

The aim of this study is to examine the break and bend verbs in Venda. Bend and Break verbs have not yet as received much scrutiny in Venda. The literature in Venda only deals with categories of words. In this regard verbs are treated from one perspective and that is morphological analysis.

In order to avoid this pitfalls this study will take into account most of the features that are important in the treatment of verbs, namely syntactic and semantic features.

1.2. THEORETICAL FRAMEWORK

Since there is hardly any study on bend and break verbs in Tshivenda the study will largely depend on secondary research method. It is the method whereby a researcher utilizes study material found in books, dissertations and articles. In this respect the study employed mainly research material from English. For instance scholars such as Alsina A,1992 (on the Argument Structure of causatives), Jackendoff, R 1990 (semantic structures), Levin, B. and Rappaport Hova, 1995 (Unaccusatives), Pustejovsky, J. 1996 (The generative Lexicon) ect.

Besides the English material there is nevertheless the research that have been done on Venda and Xhosa i.e. Maudu (1997) for Venda and Mendu (1997) for Xhosa.

Lastly this study will be done within the Lexical semantics framework. This framework is necessary because it deals with a variety of semantic aspects such as arrangement structure, Qualia, Event structure, Instrument-subject alternation, Possession alternation and Ergative verbs.

1.3. THE ORGANISATION OF STUDY

This study will be organised as follows: Chapter 1 deals with the aim and the theoretical framework of the study.

Chapter 2 deals with the Lexical semantics of the verbs. Aspects that will receive focus in this chapter are verbs classes, Argument structure, Event structure, Lexical conceptual paradigm and Lexical inheritance structure.

Chapter three treats break verbs in Venda. The chapter emphasizes semantic features that are associated with break verbs. In this regard the following aspects are pertinent: Semantic classification, Argument structure, Event structure, Possession Alternation, Instrument - Subject Alternation and Ergative verbs.

Chapter 4 handles bend verbs that are prevalent in Venda. Aspects such as Argument Structure, Event Structure, Possession Alternation, Instrument - Subject Alternation and Ergative verbs will receive attention.

Chapter five gives conclusion of the study.

CHAPTER 2

LEXICAL SEMANTICS

2.1. AIM

The aim of this chapter is to give an overview of two issues: in the first place attention will be focused on the classification of verb classes. In this regard the classification of Levin (1993) and the various issues of the program Word Net will be discussed.

In the second place the main issues with regard to the Generative Lexicon of Putstejovsky (1996) will be discussed. His approach to semantics is based on general issues in Lexical semantics. Within his system attention will also be given to various verbal alternations and specifically issues with regard to inalienable possession.

2.2. VERB CLASSES

A. Levin (1993) presents 49 semantically coherent classes of verbs whose member's pattern in the same way with respect to alternations within the argument structure of the VP such as Instrument-Subject alternation, and other properties, which are syntactically relevant. Basically, verbs are grouped together related by meaning i.e. they share one or more meaning components, and they are related through similar behaviour in syntax and or morphology. Thus, one may find a verb class which include mostly verbs of removing. Such verbs relate to the removal of an entity from allocation e.g. Musadzi u fula bodo mululoni.
"The woman takes the pot from the fire"

Such verbs as "fula" share a basic meaning of removal which includes a specification of the source from which something is removed i.e. mululoni

above. In this thesis, attention will only be given to the verbs of change of state in which we find break and bend verbs as subcategories.

B. WordNet

Breaking up the Lexicon into Semantic Domains, provides an initial, semantically based organisation of the thousands of polysemous verbs in the English Lexicon. Researchers pointed out that words that are linked by semantic and Lexical relations usually belong to the same semantic domain.

Most work on semantic networks focused on nouns, no established lexical and semantic relations were available for verbs. Any relation one chooses to link verb concepts will primarily connect verbs from the same semantic domain. Dividing the verb lexicon into semantic domains lead one to discover relations that organise verbs and verb concepts. The former kind of verbs were subdivided into 14 specific semantic domains called files: Verbs of motion, perception, contact, communication, competition, change , cognition, consumption, creation, emotion, possession, bodily case and functions, and verbs referring to social behaviour and interactions. The verbs of the concept 'be' including resemble, belong and suffice do not fit into any of the files, hence they form a heterogeneous class and does not constitute a semantic domain, and inclusive in this group are auxiliaries and control verbs e.g. want, fail, prevent, succeed and begin.

The division of the verb lexicon into semantic domains gives a grip on organizing a large amount of data. It is also necessitated by the absence of a single root verb (unique beginner) that could head the entire verb lexicon. Root verbs including 'be' and 'do' were proposed by researchers which amount to a division between activity and stative verbs reflecting major conceptual categories: EVENT and STATE. WordNet adopts verbs like 'be' and 'do' as unique beginners, but they are appropriate. WordNet distinguishes 12 senses as unique beginners.

Not all verbs are grouped under a single unique beginner within a single semantic field. Motion verbs have two distinct concepts: move 1 and move 2, expressing traditional movement and movement without displacement. Verbs of possessions are expressed by synsets [give, transfer] [take, receive] [have, hold].verbs are grouped as sets of synonyms.

Most synonyms found in English lexicon and many Anglo-Saxon\ Greco-Latinate verbs are members of the same synsets, e.g. shut and close (in English), begin-commence, end-terminate, blink-nictate, behead-decapitate, buy vs. purchase. WordNet does not account for the usage differences by means of relations among synsets. Verbs that differ with respect to their selectional restrictions cannot be placed together e.g. rise and fall.

Idiomatic verbs are included in synsets as they have metaphorical senses e.g. kick the bucket.

Word association data for verbs are spares. The results of associations and data where verbs are given as the stimulus show that at most half the responses are verbs, pointing to a syntagmastic organization that exists in parallel with a paradigmatic one [Cramer, 1968,67, Rosenwieg, 1970, 102]. The design of Word-Net is based on paradigmatic relations and doesn't accommodate direct links between words from different syntactic categories.

Semantic opposition is an important organizer of speaker's mental lexicons, and in WordNet it links many verbs pairs.

Data obtained from category membership is a source for insights where words and concepts are related in the speaker's mind. Some verbs are better category members than others.

A richer source for insight is provided by traditional dictionary entries where words are defined in terms of other words, reflecting the way in which

speakers specify their meanings. Dictionary definitions can also give evidence about semantic relations among verbs and indicate the construction of verb taxonomies. They can also provide a good heuristic for discovering verb pairs linked by various semantic relations, including manner elaborations, semantic oppositions, entailment and causation.

The number of relations in WordNet were kept small. Lexical entailment is the principle that organises the verbs with different relations. Entailment refers to the relation between two verbs V_1 and V_2 when the sentence someone V_2 e.g. snore entails sleep i.e. He is snoring entails he is sleeping i.e. the 2nd sentence holds if the first one does. Lexical entailment is an unilateral relation.

The formula an x is a y is not suitable for verbs without prior nominalization but suitable for nouns. To amble is kind of to walk,
A horse is an animal, or a spade is a garden tool. Ambling is walking or mumbling is talking form the semantic distinction between two verbs. It is different from the futures that distinguish two nouns in a hyponymic relation.

Lexicalisation involves many kinds of semantic elaborations across different semantic fields. Verbs denoting MANNER and CAUSE e.g. move vs. slide and pull, SPEED vs. run and stroll or the Conveyance of displacement (bus, truck, and bike) are good examples. English verbs denoting different kinds of hitting expresses DEGREE OF FORCE used by agent (chop, slam, whack swat, rap, tap, peck) and some refer to degree of INTERNSITY of action or state (drowse, doze, sleep, whisper, shout).
In WordNet, the troponymy relation between two verbs can be expressed by the formula to V_1 is to V_2 in some particular manner. Troponyms relate to their super ordinates along many semantic dimensions. Among competition verbs e.g. many troponyms are conflation of the basic verb fight with nouns denoting the occasion for, or form of, the fight: battle, war, tourney, joust, and duel, fend. Troponyms of communication verbs often encode the speaker's

INTENTION or motivation for communicating e.g. in examine, confess or preach or the medium of communication as in fax, e-mail or telex.

Every troponym V_1 of a more general verb V_2 entails V_2 e.g. march is troponym of walk, but marching entails walking. Activities referred to by a troponym and its more general super ordinate are always temporally coextensive e.g. one is walking. It represents a special case of entailment: pairs that are always temporally coextensive are related by entailment.

Verb hierarchies constructed by troponymy relation have a more shallower, bushy structure than nouns, and their level does not exceed four. Every verb taxonomy shows a level with far more verbs than the other levels in the same hierarchy i.e. a bulge, the layer is called L, above it is L+1 and below it is L-1. Many parallels can be drawn between those levels e.g. taxonomy arising from the verb talk: the highest - level (L+2) is a communicate verb, but L+1 contains few verbs e.g. talk and write, talk contains many troponyms like mumble, babble, slur, murmur and bark. Statements relating L+1 to L+2- To talk is to communicate in some manner is perfectly acceptable, statements relating L to L+1- To mumble/ babble/ slur/murmur .....is to talk in some manner- seem more felicitous: these verbs elaborate "talk" in different ways and the features of talk are still present. Talk on the other hand seem more remote from its superordinate, communicate. L-1 has few members compounded (e.g. telecommunicate)

Opposition in the verb lexicon expresses a complex relation encompassing several distinct subtypes of semantic opposition, e.g. converses are opposites associated with no common superodinate or entailed verb: give/ take, buy/ sell, lend/borrow, teach/ learn. They occur within the same semantic field: they refer to the same activity, but the thematic roles associated with them (SOURCE and GOAL) are mapped differently in the sentences in which they occur. Their strong lexical association is due to their frequent co-occurrence in usage-as they refer to the same action.

Most antonymous verbs are stative verbs that can be expressed in terms of attributes. Among them there are contradictory pairs, which do not tolerate degree adverbs: live/die. Exclude/ include, differ/ equal, wake/ sleep.

Opposition among verbs is based on the morphological marked ness of one member of an opposed pair e.g. tie/untie, appear/ disappear. Semantic opposition among verbs is a lexical relation holding among particular verb forms.

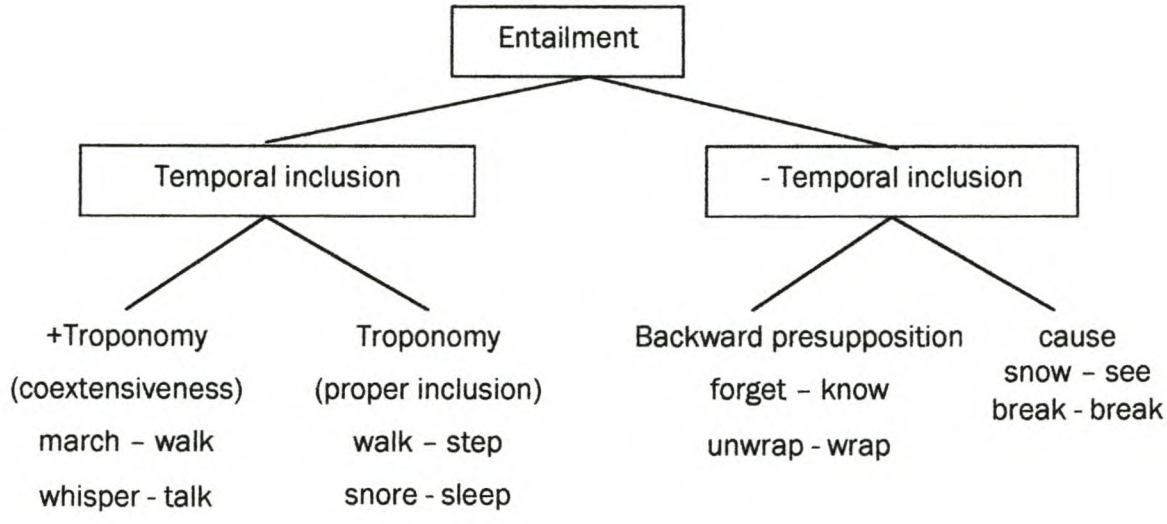
Many semantically opposed verb pairs are co-troponyms(sisters/ whose opposition is found in the way that differentiate them from their shared super ordinate e.g. rise/fall, walk/ run, they differ in direction and speed of motion.

Some opposition relations interact with the entailment relation in a semantic way. Guse (1986) distinguished an opposition relation that hold between verb pairs e.g. damage and repair, remove and replace. He states his constituties a restitutive. The whole opposition kind always includes entailment, the restitutive verb always presupposes deconstructive one.

Cause picks out two concepts, one causative (e.g. give) and esultative (like have). English has lexicalised causative pair e.g. show - see, fell-fall, linked in WordNet by appropriate pointer.

The cause relation shows up systematically among the motion verbs: bounce, roll, blow, alternate between a causative and an anticausative usage (e.g. she blew a soap bubble in his face vs. the soap bubble blew in his face. The causative variants of these verbs require an inanimate object, some unergative verbs like run, jump, gallop, walk, race, and select for animate agent have a causative reading as like in He raced the horse past the barn and The father walked his son to school.

Cater (1976) noted that causation is a specific kind of entailment: if V_1 causes V_2, then V_1 entails V_2 e.g. entailment relation between expel and leave, or bequeath and own, the entailing verb denotes the causation of activity referred to by the entailed verb. In all relations, cause is unidirectional e.g. feeding a person causes him to eat but somebody's eating doesn't entail that someone feeds that person. Four kinds of lexical entailment between verbs.



English has fewer verbs than nouns and verbs are ± twice as polysemous as nouns [fellbaum, 1990]. The most frequently used verbs [have, be, run, make, set, go, take ect] are highly polysemous, and their meanings often depend heavily on nouns with which they co-occur. When they function as light verbs too, they have different meanings e.g. make in make love, not war means to engage in, but in make a stink has a creation sense.

Verb lexicon as a semantic network shows that it shares certain properties with the noun lexicon e.g. there are "anto-relation" i.e. a number of polysemous verbs are linked by semantic relations found only in distinct word forms, e.g. there polysemous verbs whose senses are related by troponymy. Thus **behave** in broader sense means "conduct oneself" in specific sense means "conduct oneself well" (3) the children behaved (terribly/ well) last night (4) the children behaved last night. The two senses of behave and

distinct both semantically and syntactically. Behave can never be followed by an adverb in a more specific sense but the semantically less elaborate sense requires an adverb.

Polysemy among hierarchically verbs always involves a conflation of the constituent that distinguishes the semantically richer subordinate from its superordinate. Other verbs (e.g. dress and fit) behave similarly and show the same difference in semantic structure with or without an incorporated adverb.

There are few polysemous verbs whose senses are related by the kind of entailment that holds between verb pairs e.g. snore and sleep.

A verb can mean its opposite and would appear contrary to sound lexical principles. Horn (1998) cited examples given by Clark and Clark (1979) i.e. cases where the different senses of polysemous verbs stand in a relation of semantic opposition.

The semantic organization of verbs in WordNet has some psychological validity. Experiments were conducted to test the psychological reality of relations in WordNet. 1st , Chaffin, Fell Baum, and Jenei (1994) wanted to see whether linguistically naïve subjects could identify different relations among a number of verb pairs. Subjects were presented with three different tasks involving the four kinds of entailment relations (troponymy, proper inclusion, backward, presupposition and cause). In an analogy task, 48 subjects were shown one verb pair (stem) and asked to choose from among six other pairs whose numbers bore the same relation as members of the stem (key). Selection was done almost three times the level expected by chance therefore half the answers disagreed with the WordNet classification.

In a sorting experiment (2ndly), 12 subjects were asked to sort examples of the four relations. A hierarchical clustering analysis revealed that subjects

identified four main groups of relations corresponding to the WordNet classification of four kinds of entailment.

Finally, a third group of 40 subjects were given verb pairs illustrating different kinds of entailment relations. They were asked to write a relationale sentence explicating relation between the verb pairs. The subjects agreed with the WordNet classification of relations, but there was a little overlap in particular sentences used to describe relations. There was greatest agreement about troponymy. Troponymy was most accurate in the analogy task and highest in the sorting task. The least amount of agreement was found in all three experiments in cases involving proper inclusion and presumption. These relations are intuitively less obvious than troponymy and cause.

Linguistics, psychologists and anthropologists have devised different representations of the lexicon depending on which aspects of the language they focused on. WordNet does not constitute an attempt to capture all the knowledge that comes with knowing a word. The information that is explicit in other models of the verb lexicon is implicitly contained in Wordnet.

The structure of the lexicon in terms of semantic fields resembles a WordNet with its field like domains. Semantic field analysis is based on the belief that the meaning of a word in a given 'field arises from similarity and 'contrast relations between it and other words in the field.

Some linguists and lexicographers argue that a purch, relational analysis is not sufficient to describe Speaker's representation of the verb lexicon. They proposed a theory based on cognitive frames or knowledge schemata encompassing speaker's experiences and beliefs and provide conceptual foundation for the meaning of words. Words and concepts they stand for are indirectly interrelated, but share membership in common frames or schemata. Fillmore and Atkins (1992) proposed a "frame-based" dictionary wherein word

senses are linked with cognitive structures or frames, whose knowledge is presupposed for the concepts expressed by lexical items.

A lexical item associated with a "valence description" specifies both the syntactic and semantic contribution of the word in its contexts.

WordNet does not link verbs with specific noun, it provides syntantic frames for each verb, indicating number of noun arguments that the verb subcategorises. Noun slots are not at present linked to either thematic roles or semantic categories like BUYER. It could be augmented in such a way that semantic and thematic roles are linked to the noun arguments in the frames that accompany each synset.

Attempts on decomposition of verbs, according to Mc Cawley's analysis of kill in CAUSE TO BECOME NOT ALIVE, were much criticized as an inadequate theory of semantic representation and subsequently abandoned. Recent approaches to verb semantics have taken a similar line by representing the meaning of verb in terms of its Lexical Conceptual Structure (LCS). LCS consists of conceptual categories like PATH, MANNER and PLACE in addition to irreducible verb concepts such as BECOME, DO and CAUSE.

Jackendoff (1983) reveals pattern of lexical structure while Talmy's work (1985) illustrates how English motion verbs differ from their counterparts in the Romance languages in terms of the particular combinations of meaning components that compose the field of motion verbs. A semantic analysis of verbs in terms of LCS explains their syntactic behaviour. Hale, Keyser (1997) Levin, Rapport (1988) argue that only verbs whose LCS contains a CAUSE component can undergo middle formation.

According to Levin and Rapport, many verbs are semantic composed of other verbs, e.g. brush with different meanings in phrases like:

(26) brush the tangles out

(27) brush a hole in one's coat

(28) brush the coat clean

Each use of brush has a paraphrase in which brush is not the main verb. (26) means remove the tangle by brushing, (27) can be paraphrased as 'create a hole by brushing' and (28) has the meaning 'cause to become clean by brushing'.

In WordNet, compositional meanings of verbs like brush and nod are represented in distinct sense of these polysemous verbs. They are troponyms of the different basic verbs. Troponym list displays the class of verbs that can undergo the particular meaning extensions noted by Levin and Rapport (1988).

Semantic and conceptual components can reveal many of the verbs' syntactic properties. Verbs whose LCSs, are identical in terms of specific components share syntactic behaviour. Levin (1985, 1993) examines a large number of semantically based verb classes and shows how syntactic patterns systematically accompany the semantic classification. Many verb classes which share certain syntactic properties constitute verb " trees" in WordNet, formed on purely semantic grounds by the MANNER relation. The syntactic properties of co-troponyms provide the basis for distinguishing semantic subgroups of troponyms. Verbs like weave and mold, are members of creation verbs class. The creation verbs participate in a syntactic alternation that Levin terms the Material/ Product alternation e.g.

(29) she wove a rug from the black sheep's wool

(30) she wove a black sheep's wool into a rug.

Fellbaum and Kegl (1989) studied a class of English verbs participating intransitive-intransitive alternation:

(37) Mary ate bag pretzels

(38) Mary ate

The troponyms of the verb ate showed that they fall into two syntactic classes i.e. (a) those that must always be used transitively, (b) those that are always intransitive. The (a) class includes the verbs gobble, guzzle, gulp and devour and (b) class includes the verbs like dine, graze, nosh and snack. According to Fellbaum and Kegl English has two verbs eat, and each verb occupies a different position in the network and these verbs are part of a different taxonomy. Intransitive eat has the sense of 'eat a meal! Troponyms of this verb, like denominals dine, breakfast, picknic and feast, the verb eat has become conflated with hyponyms of the non meal. Intransitive eat has the sense of 'eat a meal'. Intransitive troponyms verbs much and nosh and graze are semantically related referring to eating informal kinds of meals.

The middle construction requires the presence of an adverb/adverbial:

(39) Her novel sells *(fast/like hot cakes)

(40) This car drives *(easily/ like a dream) adverb requirement in these cases is relaxed"

(41) This vegetable microwaves (easily)

(42) The suitcase zips shut (in a flash) shut is a (resultative adjective)

Troponyms can occur in middles without adverbs but the superordinate, semantically less specific verbs must be accompanied by an adverb in the middle:

(43) This vegetable cooks *(quickly)

(44) The suitcase closes *(easily)

2.3. ARGUMENT STRUCTURE

An argument is an expression, which bears a thematic role. Each argument of predicate bears a particular thematic role.

2.2.1. Assignment of Arguments

According to Rapport and Levin (1988) there are two distinct lexical representations. Arguments are the NP_s that are assigned θ – roles. Therefore, arguments are the NPs that refer to Person, things and places.
θ - role is a synonym of argument. The lexical representation is the usage of the predicate argument structure (PAS).

The term thematic role also names a specific semantic relationship, which an argument may bear to its predicate. Such a lexical representation refers to a lexical-semantic representation. There are various theories, which refer to the semantic content of θ–roles, and the one which is developed by Jackendoff (1990) refers to the lexical semantic representation as lexical conceptual structure (LCS).

In the lexical-syntactic representation the PAS of a verb indicates the number of arguments it takes. According to the number of arguments, which a predicate may take, it will be described as a one-place predicate, two – place predicate or three – place predicate. Each argument will have a specific variable corresponding to such an argument. Such as agent and theme.

The following verbs and indication of the number of arguments it may take.

ONE PLACE PREDICATE

(1). na: x (a variable)
theme (a semantic label)

TWO PLACE PREDICATE

(2). |a x (y) (variable)
agent (theme) (semantic labels)

THREE PLACE PREDICATE

(3). fha: x (yz) (variables)

agent (recipient theme) (semantic labels)

The assignment of θ -role is governed by general principle such as the projection principle and the θ-criterion. The projection principle ensures that a verb may only subcategorise for compliment that it θ-marks. The θ-criterion imposes a one-to-one association between θ-roles and arguments: each argument bears one and only one θ-role and each θ -role is assigned to one and only one argument. Each variable in the PAS of the predicate la in (2) must be saturated. In other words it must correspond to some syntactic constituent e.g. an NP.

[Ńwana] u la [vhurotho]

In (4) the variable x or the agent corresponds to the NP 'nwana' while the variable y or theme argument corresponds to the NP 'vhurotho'

The PAS of 'la' has two variables x and y and these variables are the theta-roles assigned by 'la'. The two arguments represented by 'nwana' and 'vhurotho' will each have one θ-role.

Θ -role assignment gives the association between the NP in the argument position of a verb in the syntax and the variables in the PAS of the verb.

According to Rapport and Levin (1988:14) there are three modes of θ-roles assignment: a verb, a preposition and a VP via predication. The NP arguments of a verb in the syntax are not the same if one considers the manner in which they are assigned a θ-role.

According to Williams (1981) the NP argument, which is assigned a theta role by the VP via predication, must be outside the maximal projection of the verbal phrase required by predication theory. The verb may assign a theta role to the NP argument in the subject position and this argument is an external argument.

The remaining arguments are internal to the maximal projection of the verb. The sub-catergorization features of verb indicate the syntactic categories that appear as sisters or complements to that verb which is the head within a verb phrasal. All positions for which a verb subcategorises are theta positions, that is the verb assigns a θ-role to each of these position. If a verb assigns a thetha role to a position, it θ-marks that position. The argument that appears in the position subcategorised by a verb is called the internal argument.

Marantz (1984) distinguishes between a direct and indirect NP argument. The NP argument which is assigned its θ-role directly by the verb, is the direct NP argument. The NP argument which is assigned its θ-role by a preposition is an indirect NP argument.

The internal NP arguments assigned their θ-roles in the syntax under-goverment, i.e. the verb or preposition that assigns a θ-role must govern such an internal NP argument. Direct NP arguments are usually the objects of a preposition. The external NP argument must be in a relation of mutual command with the maximal projection of the verb.

The lexical-syntactic representation with variables makes no reference to the semantic content of the NP arguments. It gives the establishment of correspondences between positions in PAS and positions in syntax. Such θ-roles labels as agent, theme, experiences, patient and others have played a role in various grammatical rules and principles. In the place of the variables above θ-role labels are given:

(7) vhea: [Agent Theme Location]

There seems to be consensus about an appropriate set of θ-role labels and the criteria for determining what θ-role label an argument may have.

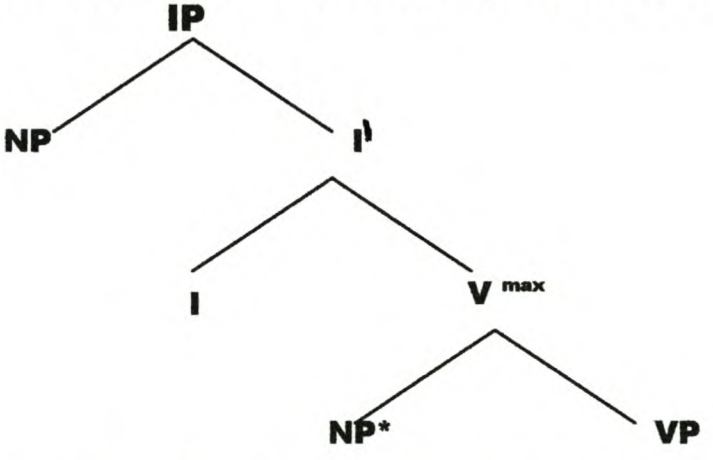
According to Jackendoff (1990:259) an appropriate lexical-semantic representation can be found in the lexical conceptual structure (LCS). He gives a list of the combinations of thematic roles and NP argument structures e.g.

(8) Actor/Theme: [Matamela] u a tuwa
Actor/Agent, Beneficiary: [Vhanna vha thusa [vhasadzi]

Jackendoff argued that an NP may bear more than one-role e.g. the subject of 'tuwa' can be assigned both the actor and theme θ-roles:

Binouds (1978), Pollock (1989) and Chomsky (1989) expanded the category inflection. The X-bar theory and various functional categories have been recognised. They play a role in establishing dependencies between parts of a sentence and they are represented as heads projection X-bar phrases. Any morphonosyntactic formative which corresponds to a functional category in a given language is syntactically the head of a maximal projection.

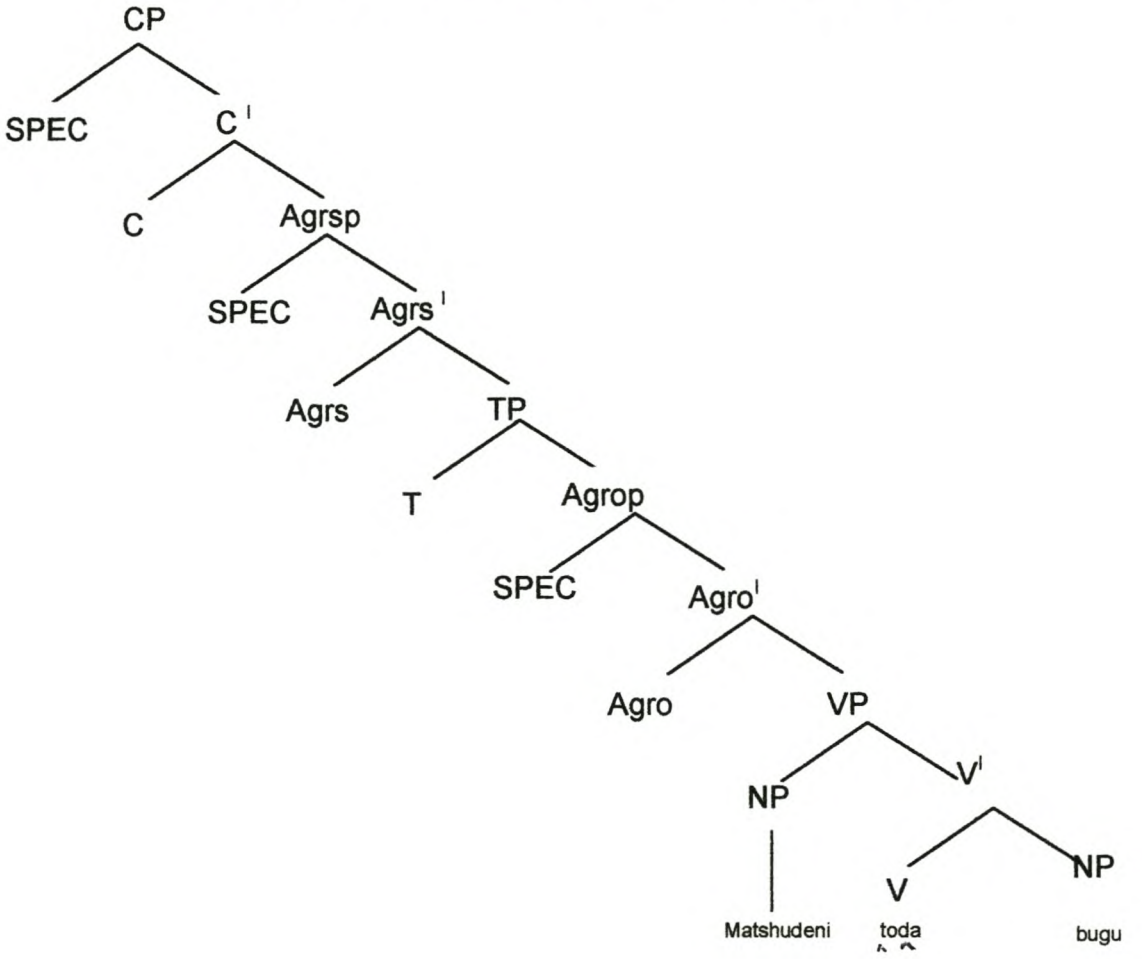
These developments have put the position of the external argument in jeopardy. Koopman and Sportiche (1991) state that the d-structure position of the subject has to be re-evaluated. The structure of a clause according to them is the following:



NP* is the canonical or D-structure position of the subject while NP^ is its S-structure position. A subject generated in position NP* must move to position NP^.

According to Chomsky (1986) the external NP argument, i.e. the NP in the structure shown has to be in that position because of the conditions for theta assignment. A theta assignment relation between X and Y requires sisterhood between X and Y for a subject NP to receive any theta role it must have a sister VP. The external NP argument must be in a relation of mutual C-command with the maximal projection of the verb. If the external NP arguments were to be in the NP position in the structure above, it would receive no theta role because all the inflectional categories have been placed between NP^ and the maximal projection of the verbs there is thus no sisterhood between this NP and the VP.

Chomsky (1992) refined this position and it has become known as the VP internal subject hypothesis. In the structure like the following the external NP argument will appear internally in the VP but its θ-role will still be assigned by the VP.



Williams (1994) developed a "bare" theta theory. It is also a lexical-syntactic representation because no mention is made of the semantic contents of the theta roles. He assumes that there are a number of distinguishable arguments A_1 ...A_n, for each verb.

An NP in a sentence must be an argument of verb. This relation between a verb and a noun phrase has three features:

In the first place this relation is obligatory: an NP in a sentence must be an argument of some verb:

(13) [Maluta] u funa [mulalo]

The verb 'funa' is a two-place relation where the NP_s Maluta and Mulalo are arguments of the verb 'funa'. The subject argument is always obligatory:

(14) [Maluta] u a tuwa.

The subject argument is Maluta. Where subject arguments are missing, they are represented by an empty pro with subjectival agreement;

(15) [pro_1] vha_1-a-tuwa

'They are going home'

Such missing subjects are interpreted as definite. They refer to some definite NP.

Nonsubject arguments are optional. The verb must specify whether their arguments are obligatory or not. The arguments of a verb like 'vhea' are obligatory.

(16) a) * Ndi a vhea
'I put'

b) Ndi vhea [phuleithi] tafulani]
'I put the plate on the table'

The object argument of a verb like 'la' need to not be specified; it may be optional.

(17) (a). Ndi a ḽa
" I am eating"

(b). Ndi ḽa zwiliwa
"I am eating food"

In (a) the object is missing; while it is presented as 'zwiḽiwa' in (b). Missing objects are interpreted as generic. The missing object of 'ḽa' has generic reference; it refers to a class of object, which can be eaten.

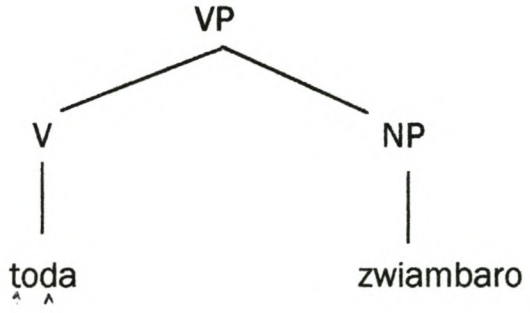
2nd place; this relation between a verb and an NP is unique because one NP may not be assigned two theta-roles

(18) [Maluṱa] u ṱoḓa [fhethu ha u dzula]
"Maluṱa wants a place to stay"

Maluṱa is assigned the subject argument while the NPi [fhethu ha u dzula] is assigned the object argument by the verb 'ṱoḓa'. Each NP is assigned one θ-role within an argument complex, which consists of verb 'ṱoḓa' and its arguments. Maluṱa and [fhethu ha u dzula] each phrase is assigned one theta role

3rd place, the relation between a verb and NP is structurally local the verb and its argument must be sisters.

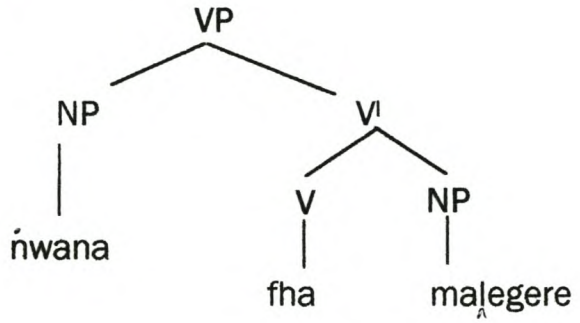
(19)



The NP 'zwiabaro' which is a compliment of the verb 'ṱoḓa' is also its sister.

With a verb like 'fha'which has two object arguments; the argument NP_s may not be sisters of the verb:

(20)



The NP argument 'ńwana' in the sentence :

(21) Ndi fha ńwana maḽegere.

Is not a sister V but of V' This relation is not local but the relation between 'fha' and 'maḽegere' is local; maḽegere is a sister the V 'fha'. In this case m- command is necessary: a verb and its arguments must be dominated by the same maximal projection. I.e. the VP is a maximal projection and it dominates the verb 'fha' and its two arguments 'ńwana' and 'maḽegere'

2.3.2 Types of arguments

The argument structure for a word can be seen as a minimal specification of its lexical semantics.

Research has been conducted on the assumption that argument structure is the strongest determinant constraint on the acquisition of verb meaning in child language acquisition. (Gleitman 1990; Fisher and Gleitman (1991)

Four types of arguments for lexical items

1. True arguments:
   Syntactically realized parameters of the lexical items e.g.
   [Hedzi kholomo] dzo khwaṱha.
   'These cattle are fat'.

True arguments define those parameters, which are necessarily expressed at syntax. This is the domain generally covered by the θ-criterion and other surface conditions on argument structure.

The argument for a lexical item e.g. ARG_1 ... ARG_2 ... ARG_n are represented in a list structure where argument type is directly encoded in the argument structure i.e. ARGSTR, where D-ARG is a default argument and S-ARG is a shadow argument:

(1)
$$\begin{bmatrix} a \\ ARGSTR = \begin{pmatrix} ARG_1 = \ldots\ldots\ldots \\ ARG_2 = \ldots\ldots\ldots \\ D = ARG_1 = \ldots\ldots\ldots \\ S = ARG_1 = \ldots\ldots\ldots \end{pmatrix} \end{bmatrix}$$

The Lexical semantics for the following verbs can now be partially represented with argument structure specifications. The contents of the arguments are drawn from the selection restrictions of the lexical items such as verbs. Such arguments may be forced to appear with certain features.

(2)
$$\begin{bmatrix} \text{- lal} \\ ARGSTR = (ARG_1 = \text{animate individual}) \end{bmatrix}$$

The verb - lal assigns one argument only and this argument has the above two features because only animate beings are able to sleep.

The argument structure of nouns depends on the number of difference senses which a specific noun may have. The following nouns appear with only one argument.

(3) tshiḍula (frog) : [ARG_1 = animal]
tshilidzi (mercy) : [ARG_1 = state]
ṱafula (table) :[ARG_1 = artifact]
murahu (back) [ARG_1 = limb]

Nouns may have more than one argument i.e. they may have two or more different senses:

(4) $\begin{pmatrix} ARG_1 = \text{animate, individual} \\ ARG_2 = \text{artifact} \end{pmatrix}$

The noun 'thavha' may have a meaning of either a mountain or a large heap of anything.

(5) $\begin{pmatrix} ARG_1 = \text{physical object} \\ ARG_2 = \text{descriptive} \end{pmatrix}$

The noun 'muṅango' (door) may refer either to the opening through which one may enter or it may refer to the actual door itself:

(6) $\begin{pmatrix} ARG_1 = \text{physical object} \\ ARG_2 = \text{aperture} \end{pmatrix}$

A noun like 'gurannḍa' (newspaper) may refer to the three different senses: as a source of information, an organization which owns the paper and a physical object which one may buy.

(7) $\begin{pmatrix} ARG_1 = \text{organization} \\ ARG_2 = \text{physical object} \\ ARG_3 = \text{information} \end{pmatrix}$

A noun like 'halwa' (beer) may refer to the liquid itself or to the bottle.

(8) $\begin{pmatrix} ARG_1 = \text{liquid} \\ ARG_2 = \text{physical object} \end{pmatrix}$

The argument structure of verbs will look at the specifiers and complements of the verb to establish what may appear together with it. A verb like 'gotsha' (roast) will need a person to do the roasting; and it will need some food to be roasted :

(9) $\begin{pmatrix} ARG_1 = \text{animate, individual} \\ ARG_2 = \text{food} \end{pmatrix}$

A verb such as 'humbula' (think) will need a person as subject and any object as compliment :

$\begin{pmatrix} ARG_1 = \text{person} \\ ARG_2 = \text{object} \end{pmatrix}$

atsamula (sneeze) with one argument:

[ARG=animate individual]

vhuya (return) with two arguments :

$\begin{pmatrix} ARG_1 = \text{physical object} \\ ARG_2 = \text{place} \end{pmatrix}$

hama (milk) with two arguments :

$\begin{pmatrix} ARG_1 = \text{person} \\ ARG_2 = \text{animal} \end{pmatrix}$

2. Default arguments :

Default arguments are parameters which participate in the logical expressions in the qualia; but which are not necessarily expressed syntactically; e.g.

9. (a). Ndo vhaḓa ndou nga thanda.

'I curved an elephant out of wood'.

(b) Ndo fhaṱa nndu nga matombo.'

'I built a house out of stones

In (a) we have examples of the material product alternations. Because the material (thanda ;, matombo) is optional, its status as an argument is different from the created object (ndou, nndu). The optional arguments in alternations such as the material/product pairs are called default arguments. They are necessary for the logical well deformedness of the sentence, but may be left unexpressed in the surface syntax.

The argument structure of verbs with default argument i.e. with verb –(build)

(12)

$$\left[\text{- fhat -} \quad \left[\begin{array}{l} \text{ARGSTR} = \text{ARG}_1 = \text{animate, individual} \\ \qquad\quad \text{ARG}_2 = \text{artifact} \\ \qquad\quad \text{D - ARG}_1 = \text{material} \end{array}\right]\right]$$

3. Shadow arguments

Shadow arguments are parameter which are semantically incorporated in to the lexical item. They can be expressed only by operations of sub typing or discourse specification.

(13) (a). Ndo di kanda [nga tombo] kha munwe

'I hit myself with a stone on the finger'

(b) O mu sedza [nga mato a lufuno]

'He looked at her with eyes which revealed love'

(c) Ndi do shela madi [ngomu ngilasini]

'I will pour the water in to the glass'

(d) Ndo lifha watshi [nga tshelede]

'I paid for the watch with money'

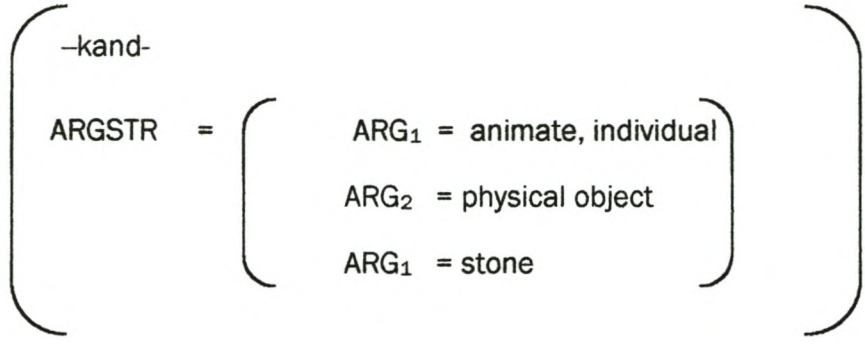
(e) Ndo funga mulilo [nga metshisi]

'I lit the fire with matches'

Shadow arguments in (13) appear in brackets. They refer to semantic content that is not necessarily expressed in syntax. They are expressible only under specific conditions within the sentence itself, namely when the expressed arguments stand in a sub typing relation to the shadow argument. The conditions under which these arguments can be expressed are very specific. In 13 (a) the hitting could have been done by anything but the specific instrument is 'tombo' (a stone) and not "hamula' (a hammer). In 13 (c) the water could have been poured in anything but here specifically into the glass.

Such shadow arguments may be represented as follow with the verb-kand- and in 13(a).

(14)



4. True adjuncts

They are parameters which modify the logical expression but are part of the situational interpretation, and are not tied to any particular lexical items semantic representation These include adjunct expressions of temporal or spartial modification.

15.a. Muya u ya vhudzula [thavhani]

'The wind is blowing in the mountain'

b. Mulilo wo duga [nḓuni]

'The fire smoked in the house'

c. Ndo dzula hafha [minwedzi mivhili]

'I stayed here for two months'

d. A ro ngo mu vhona [mulovha]

'We did not see him yesterday'

e. Nwana o eḓela [iri mbili]

'The baby slept for two hours '

All in brackets in (15) are the true adjuncts. These arguments are associated with verb classes and not individual verbs. These verbs are modified by temporal expressions as in (15d-f) or locative modifiers as in (15a-c) and is inherited by virtue of the verbs classification as an individual event.

2.3.3. Selection restrictions

When verbs select certain arguments to appear with them, they also select semantic features which these arguments must have in order to appear with such a verb, e.g. the verb 'huvha' (barks) will assign two arguments: The first argument will be assigned to the noun phrase in the subject position :

Mmbwa i - huvha muthu.

The dog barks at the people'

In the sentence above, the first argument is 'mmbwa'. The question then is whether the verb 'huvha' requires this argument to have specific semantic features i.e. whether there are any selectional restrictions on this argument. It appears that the act of barking can only be done by a dog. Thus, this argument will have a selection of mmbwa:

[ARG_1 = mmbwa]

The second argument above is 'vhathu' and the question is then whether 'huvha' requires any selection restriction on this argument. One should be able to say that if a dog barks, what is it that he barks at. One can then see dogs may bark at anything i.e. there may be no clear selection restriction on this argument.

[ARG_2 = physical object]

2.3.4. Inalienable Possession

In alienable possession may be used as an adjunct of an intransitive verb and is also known as the syntax of body parts. The inalienable possession which started off as a possession in the subject of the intransitive verb, ended up as adjunct of that verb. This adjunct shares the theta-role to be found in the subject position, having no theta -role of its own:

(9) Milenzhe yanga yo zwimba

'My feet are swollen'

Ndo zwimba milenzhe

Examples with transitive verbs:

(10) (i) Ndo tumula [munwe wa nwana]

'I cut the child's finger'

(ii) Ndo tumula [ṅwana munwe]

(iii) Ndo u tumula munwe ṅwana

(iv) Ndo mu tumula ṅwana munwe.

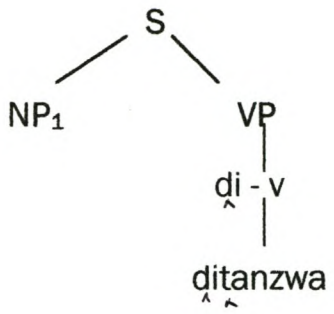
A further development in the syntax of body parts is concerned with the use of the reflexive morphine -di- together with the body parts. It is accepted that reflexives are to be treated in the same way as the reciprocal affix-an- i.e. they are dependent on argument binding and not syntactic binding. They will thus have no syntactic NP as object:

(8). Ndi a ḓitanzwa

'I am washing myself'

The structure of the above sentence in (8)

(9)



This reflective di-may be found regularly with body parts:

2.3.5. Verbal suffixes as controllers of transitivity

2.3.5.1. The suffixes [l] and [w]

There is a category of verbs which displays the regular alternation of transitive and intransitive verbs. This regular alternation is caused by the verbal derivational suffixes -l- and -w-. They are the same as ergative verbs because they assign two internal- roles i.e. agent, patient or theme. The intransitive verbs with -w- and the transitive with -l- alternation appear in sentences that looks like the derivation of the ergative pairs. The difference with ergative verbs is that the transitivity of the verb is determined by overt morphemes

11. Thukhula: Mutukana o -thukhula thambo

'Boy AGR -cut rope'

'The boy cut the rope'

12. Thukhuwa: Thambo: -a- thukhuwa

'rope AGR - is- cut'

'The rope is cut'

The suffix –l- has the feature causative while the suffix –w- has an anticausative feature.

Verbs with the suffix-l- may be represented in the following d-structure.

(13). [NP] INFL [VP thukhula mutukana thambo]

'cut' 'boy 'rope'

In (14) the agent is moved to the subject position, S-structure is represented as follows:

(14). [mutukana i] INFL [VP thukhula t i thambo]

Boy cut rope

Mutukana and trace are coindexed to indicate the relationship.

Suffix –w- controls the agent argument. Such verbs may appear in the following d-structure.

(15. [NP] INFL [VP thukhuwa thambo]

'be cut' 'rope'

The patient may move from its original position to occupy the subject position in the following S-structure:

(16). [Thambo i] INFL [VP- thukhuwa t i]

'rope' 'be cut'

Thambo (rope) and trace are co-index to signify the relationship.

CASE ASSIGNMENT

The intransitive suffix –w- does not have case assignment features, thus it is important for the patient (thambo) (16) to be moved to the subject position so that it

may be assigned Nominative Case by agreement. By comparing suffix –w- and suffix –l- it is found that suffix –l- has accusative case assignment features, then Patient is assigned case by suffix –l-. (see 16).

2.3.5.2. The irative – vkan -/ -vkany

In this subsection explanation will be given in order to indicate the operation of the verbal suffixes [-vkan-] and [-vkany-]

The V shown before the roots –kan-and kany- represent vowels e,u,or o. This extension indicates in most cases an action carried out with force, intensively, repeatedly or completely. The roots –ekan-, -ukan-,-are intransitive while –ekany- and- is transitive.

(17). (a). Thanda yo- vundekana [-ekan-]
'Pole- AGR – broke'
'The pole is broken into pieces'

(b). Munna o – vundekanya thanda [-ekany-]
'Man – AGR – break – PERF – pole'
'The man broke the pole into many pieces'

The suffix – ekany – carries causative feature while suffix – ekan – has Anticausative semantic feature. The d-structure containing – ekany- is represented as follows:

(18). [NP] INFL [VP vundekanya Ofhani thanda]
'break' Ofhani 'pole'

Sentence (17(b)) is formed by moving the agent argument Munna to the subject position. Then its S-structure will appear as follows:

(19). [Munna] INFL [VP- vundekanya t thanda]
'Man' 'Break' 'pole'

The agent argument munna left the trace to indicate that something has been moved from this position. Munna and trace (t) are coindexed to show the relationship.

Intransitive suffix – ekan – controls the agent argument. Its d-structure is represented as follows:

(20). [NP] INFL [VP – vundekana thanda]
'be broken pole'

The S-structure is characterized by moving the Patient argument (thanda) to the subject position:

(21). [thanda i] INFL [VP – vundekana t$_i$]
'be broken'

The Patient argument thanda (pole is coindexed with t (trace) to signify relationship. Trace indicates that something has been moved from this position.

Suffix – kan- does not have case assignment features thus it is important for the patient to be moved from its position to the subject position so that it may be assigned Nominative case by agreement in(19) above. By comparing them (suffix – ekan- and –ekany-) been concluded that suffix –ekany- has the features of accusative case assignment, it assigns case to the patient (21) above.

1.3.6. Instrument – Subject Alternation

1.3.6.1 The instrument.

Levin (1993) states that "oblique" subjects of this type have been characterised as "instrument". The distinction has been made between enabling instruments which cannot turn up as subjects and intermediary instruments which can.

1. (a). [Munna] o-pwasha [fasitere] [nga hamula]
'The man broke the window with the hammer'

Nga is a preposition. Hamula is a complement because of the presence of nga. At the same time nga assigns θ–role to hamula. The NP hamula has an interpretation of instrument. It may appear as the subject of the sentence.

(b). [Hamula] yo –pwasha fasitere.
'The hammer broke the window'

In the sentence above, hamula is the subject of the sentence, and it still has the meaning of the instrument.

2.4 EVENT STRUCTURE

Aspectual class

Verbs and verb phrases differ in the kinds of eventualities in the world they denote. There are at least three aspectual types, i.e. state, activity and event where the last class is itself sometimes broken down into accomplishment and achievement events. The verb 'tshimbila' in sentence (1) denotes an activity of unspecified duration. The sentence itself does not convey information regarding the temporal extent of the activity, although deictically is an event in the past which did terminate.

1. (a) Masindi o- tshimbila mulovha
   'Masindi walked yesterday'
   (b) Masindi o- tshimbilela nḓuni yawe mulovha
   'Masindi walked to her house yesterday'

According to (Kenny (1963), Vendler (1967), Ryle (1949) Mourelatos, (1978) Verkuyl (1972), Dowty (1979) such a sentence as (la) is said to denote an activity. Other examples of activity verbs are 'gidima' (run) 'shuma' (work) 'edela' (sleep). Sentence (1b) convey the same information as (1a) with the additional constraint that 'Masindi' terminates her activity of walking at her house but sentence (1b) does assert that the process has a logical culmination, whereby the activity is over when 'Masindi' is a home. This type of sentence denotes an accomplishment event. The verb 'tuwa' (walked) seems to lexically default to an activity. There are verbs which seems to lexically denote accomplishment such as 'fhaṱa' (build) and' tshinyadza' (destroy).

2. (a). Masindi o-fhaṱa nnḓu
   'Masindi built a house'
   (b). Masindi o-tshinyadza ṱafula
   'Masindi destroyed a table'

In (2a) the existence of the house is the culmination of 'Masindi's' act, while in (2b) the non-existence of something denotable as a table is the direct culmination or consequence of her act.

Creation-verbs are only the best example of accomplishment

Performance – verbs like 'tamba' (play) permit both activity usage (3a) and accomplishment usage (3b).

3. (a). Masindi o-tamba bola (iri nnzhi)
   'Masindi played soccer (for many hours)
   (b). Masindi o-tamba bola miniti ya fumi
   'Masindi played soccer in ten minutes'

One classic diagnostic for testing whether a verb or verb phrase denotes an accomplishment is modification by frame adverbials like in an hour, the so-called frame adverbials as in (3b).

In (4) both derived and lexical accomplishments licence such modification, while activities (5) do not.

4. (a). Masindi o-ya vhengeleni nga iri – nthihi
   'Masindi walked to the store in an hour'
   (b). Masindi o-fhaṱa nndu nga ṅwaha muthihi
   'Masindi built a house in a year'
   (c). Maṱhabi o-ṅwa nga minithi ya mahumi mavhili.
   'Maṱhabi drank in twenty minutes'
   (d) Masindi o-shuma iri nthihi
   'Masindi worked in an hour'

The frame adverbial requires that the verb phrase make reference to an explicit change of state, a precondition missing in (5a) and (5b).

Achievement is the last conventional aspectual classification. It is an event that result in change of state. In sentences (6a) (6b) and (6c) the change is not a gradual

one but it has a point-like quality. Modification by point adverbials at 3p.m denotes achievement.

(11) (a). Mathabi o-lovha nga -3
'Mathabi died at 3pm'
(b). Mathabi o-wana tshipatshi nga -3
'Mathabi found his wallet at 3pm'
(c). Masindi o-swika nga masiari
'Masindi arrived at noon'

Point adverbial modification is not restricted to achievements e.g.

(7). (a). O - Tala mulambo nga -10
'She swam the river at 10h00'
(b). O - lidza phiano nga masiari
'He played piano at noon'
(c). Itani o- funza kilasi nga 2.30
'Itani taught his class at 2.30pm'.

The point-adverbial indicates the starting time of an event of some specific duration. Sometimes lexical properties of the verb can be affected by factors that could not be lexical. Example sentences in (8) there is a shift in the meaning of 'la' from an activity as in (8a) to an accomplishment as in (8b).

(8). (a). Masindi o-la legere
;Masindi ate sweet' (activity)
(b). Masindi o-la legere
'Masindi ate a sweet' (accomplishment)

(9). (a). Avha vhathu vho-fhata ndila nga Kapa
'These people built this road in Cape Town'
(b). Avha vhathu vha-fhata ndila ya Zimbabwe.
'These people build roads in Zimbabwe'

Another aspectual shift is from pluralisation of the subject of achievements which comes from complementation pattern with aspectual predicates such as begin and finish e.g.

(10). (a). *John began finding a flea on his dog.
(b). *The guest began to arrive.

(11). (a). John began finding fleas on his dog
(b). The guests began to arrive.

Carlson (1977) and Kratzer (1989) distinguished two kinds of stative predicates individual –level and stage – level. Predicates such as tall, intelligent, overweight might be thought of as properties that an individual retains and can be identified with the individual directly. They are individual-level predicates. Properties such as hungry, sick, and clean are identified with non-permanent states of individuals and have been called stage –level predicates.
Individual level predicates may appear in the present tense and may be verbal, adjectival or relative predicate.

Adjective
-kale (old), pfufhi(short), -lapfu(tall)
nominal-relative stems:
tshena(white), ntswu(black)
Verbs
-penga(be mad), -bvafha(be lazy)

Stage level predicates are characterised by the property of appearing mostly in the perfect tense with a present tense meaning.

-khwatha(fat), -takala(healthy), -sina(rotten)
-dala(be full), -ndala(hungry)

Stage level predicates in the present tense:
-lwala(be sick), -takala(be glad), fhedzi(be naked)

There are four categories of aspectual types of verbs i.e.
Activities: tshimbila(walk), gidima(run), tala(swim), nwa(drink),
Accomplishments: fhaṱa(build), tshinyadza (destroy),pwasha (break)
States: lwala (sick), ḓivha (know), funa (love), fana (resemble), humbula (think)
Achievements: fa (die), wana (find), swika (arrive).

Extended event structure

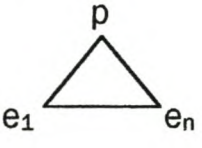
Event types

The following categorisation of aspectual types of verbs, verb phrases and sentences may be found: activities, accomplishments and achievements collapsed and state.

Events can be sub classified into three sorts: processes, state and transition. Activities becomes processes while accomplishments and achievements collapsed to transitions.

State (s): a single event which is evaluated relative to no other event. .
Examples : be sick, love, know.
Structural representation:

Process (P): a sequence of events identifying the same semantic expression
Example: run, push, drag
Structural representation

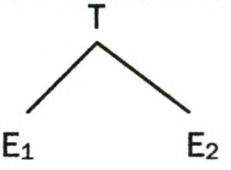


According to Dowty (1979) when P is a process verb, then if the semantic expression P^1 identified with P is true at an interval, the P^1 is true for all subintervals of I larger than a moment.

Transition (T) an event identifying a semantic expression, which is evaluated relative to its opposition (Jackendoff, 1972,Lakoff, 1970, Wright 1963)

Examples: give, open, build, destroy.

Structural representation: E is a variable for an event type



(1) $\begin{bmatrix} ARGST = ARG_1\ ARG_2\ \ldots\ldots\ ARG_n \\ EVENTSTR = EVENT_1\ EVENT_2\ \ldots\ldots EVENT_n \end{bmatrix}$

The verb fhata (build) is typically analyse as involving a development process and a resulting state :

2. $\begin{pmatrix} \text{-fhat-(build)} \\ EVENSTR = \begin{bmatrix} E_1 = \text{process} \\ E_2 = \text{state} \end{bmatrix} \end{pmatrix}$

Unlike fhata (build) which contraints the types of its two subevents to PROCESS and STATE, the verb accompany permits either telic events, TRANSITIONS or PROCESSES:

3. -fhelekedz = (accompany)

$$EVENTSTR = \begin{bmatrix} E_1 = T_1 \\ E_2 = T_1 \end{bmatrix}$$

A verb like 'humbula' (think) will have one event.

$[E_1 = \text{process}]$

Verbs like tanganya (connect) gotsha (toast) may have two events:

[E_1 = PROCESS]

[E_2 = STATE]

The process will change something into a state, i.e. two things are now connected or toasted referring to states.

2.5. LEXICAL CONCEPTUAL PARADIGM (lcp)

A lexical item may have various meanings or senses e.g. the noun 'nngu' may refer to the meat of the sheep which we eat i.e. mass noun or it may refer to a real sheep i.e. a count noun. A verb like 'khana' may also have various meanings such as to dance or to leap.

The same applies to nouns such as newspaper. Nouns like newspaper appear in many semantically distinct contexts able to function sometimes as an organisation, a physical object or the information contained in the articles within the newspaper

(a). The newspapers attacked the President for raising taxes.

(b) Mary spilled coffee on the newspaper.

(c). John got angry at the newspaper.

(a). Count/Mass alternations, lamb

(b). Container/ containee alternations, bottle

(c). Figure/ Ground Reversals, door, window.

(d). Product/Producer diathesis, newspaper, Honda

(e). Plant/ food alternations, fig, apple

(f). Process/ Result diathesis, examination, merger

(g). Place/people diathesis, city, New York

Lexical conceptual paradigms illustrate that syntactic information is inheritable between lexical items. Nominals such as merger joint venture and consolidation are ambiguous between a process interpretation (the act of merging) versus the resulting entity or state (the merger which results)

NOUN CONSTRUCTION

(a) The house's construction was finished in two months.

(b) The construction was arduous and tedious.

(c) The construction is standing on the next street.

These three sentences make reference to the process, and the result of the process, respectively.

The following nouns may have various senses:

Thavha(mountain)

[mountain, largeheap-lcp]

Munango (door)

[physical object, aperture-lcp]

Halwa (beer)

[liquid, physical object- lcp]

humbula (think)

[think, intend-lcp]

Gotsha (roast)

[fry, roast, grill, bake,-1cp]

2.6. LEXICAL INHERITANCE STRUCTURE (LIS)

Semantic concepts are organised hierarchically into levels from specific to generic. In nouns and verbs there is a relative small number of generic concepts : for nouns ±26 and for verbs ±15.

These hierarchies are inheritance systems. They go deeper than ten levels.

NOUNS

Waini(wine)	Liquid, intoxicating, food
Nngwe (leorpard)	Carnivore, wild animal, vertebrate, animal
Maine (doctor)	Doctor, professional, medical worker, person .

VERBS

fhanduwa(crack)	Crack, break, change
kakamela (stammer)	Stammer,manner of speaking, communication
elela(flow)	Flow, meander, existence
Ofha(fear)	Fear, experience
U tswa (steal)	Steal, remove, contact,

CHAPTER 3

BREAK VERBS

1. AIM

The aim of this chapter is to investigate the break verbs in Tshivenda. Break verbs in Tshivenda. May be classified into seven subgroups according to the meaning of the verbs.

In the syntactic classification, transitive, intransitive and verbs with suffixes [-l-] and [-w-] will be discussed. The external and internal argument will be treated separately. Suffixes such as [-l-], [-w-], [-vkan-] and [-vkany-] will be examined. These suffixes have the main function of indicating that a verb is either transitive or intransitive.

The selection restrictions on each of the arguments of the break verbs will be dealt with separately. This chapter will be also explore the possession alternation with transitive and intransitive. The operation of the instruments subject alternations will also be treated. Lastly the event structure, lexical conceptual paradigm and lexical inheritance structure where the break verbs all belong to the verb class which denotes a change of state will be discussed.

2. SEMANTIC CLASSIFICATION

Break verbs in Tshivenda may be classified into seven sub groups according to the meaning of the verb:

2.1. Break verbs

(pwasha, vunda)

Tshithu tshi-no-pwashea kana u vundea tsha bva zwipida (something which is breakable or separated into two or more parts)

a. Mme vho pwasha [khali]

"Mother broke the clay pot"

b. Maemu o vunda [thanda]

"Maemu broke the stick"

2.2. Break easily, snap verbs

(thukhula/thukhuwa)

Tshithu tshi no thukhuwa hu si na u konda kana vhuleme tshi tshilapfu(something long that breaks easily, cause something to break suddenly with a sharp noise)

a. Mbudzi yo thukhula [thambo]

"The goat broke the rope"

b. Thamb yo-thukhuwa

"The rope broke"

2.3 Break off verbs

(tumula/tumuwa, phamula/phamuwa, khopha/nwata, afhula/afhuwa)

Tshithu tshi -no -tumuwa, phamuwa, khophea, ṅwatea, kana u afhuwa tshi tshi bva kha tshiṅwe tsha bva zwipida (something that is cut into pieces, split off a piece, split, break off, something to become separated from something as a result of force)

a. Ṅwana o-tumula [nala]

"The child cut off the nail"

b. Musidzana o pwasha [khaphu]

"The girl broke the cup"

c. Musadzi o khopha [mphwe]

"The woman broke the sugar cane"

d. Mme vho ṅwata [vhuswa]

"The mother broke the porridge"

e. Masindi o afhula [khali]

"Masindi broke the clay pot"

2.4. Demolish verbs

(Phunya, thutha)

Tshithu tshi no thuthea kana u phunyea (to pull or knock down something e.g. building)

a. Maemu o phunya[guvha]

"Maemu demolished a mud wall"

b. Khotsi vho thutha [nndu]

"The father demolished the house"

2.5. Split, Crack verbs

(fhandula/ fhanduwa, fhanza, devha)

Tshithu tshi-no-fhanduwa, devhea kana u fhanzea tsha bva zwipida (something which is breakable, to cause something to break into two or more parts, thing which is firm and breakable)

a. Mutukana o-fhandula [tshinoni]

"The boy broke the bird"

b. Malume vho-fhanza [khuni]

"The uncle broke the wood"

c. Mukegulu o-devha [nduhu]

"An old lady broke the peanuts"

2.6. Burst verbs

(Balea)

Tshithu tshi-no-thathaba kana u balea tsha bva mutwe kana zwipida zwi tshi i tiswa nga muya u re nga ngomu khatsho (explode, to cause something to break violently open or apart especially because of pressure from inside)

a. [Thaela ya-goloi] yo-balea

"The tyre of the car burst"

2.7. Tear verbs

(kherula/ Kheruwa)

a. Musidzana o-kherula [rokho]

"The girl tore the dress"

3. SYNTACTIC CLASSIFICATION

The break verb in Tshivenda may be classified into three groups:

3.1. Transitive verbs

These verbs appear with an internal argument which is the object of the verb: pwasha, vunda, khopha, fhanza, devha, ṅwata, phunya, thutha.

a. Kholomo yo-pwasha [fasitere]

"The cow broke the window

b. Musidzana o-vunda [thanda]

"The girl broke the stick"

c. Makhulu vho-khopha [mphwe]

"The granny broke the sugar cane"

d. Mme vho-fhanza [khuni]

"The mother broke the wood"

e. Munna o-devha [ngilasi]

"The man broke the glass"

f. Mupapa o-n̊wata [tshilalelo]

"The pope broke the holy communion"

g. Mutukana o-phunya [luvhondo]

"The boy demolished the wall"

h. Mvula yo-thutha [nn̂du]

"The rain demolished the house"

3.2. Intransitive verbs

Only one break verb is intransitive, i.e. it appears with only an external argument: balea (burst).

a. Musadzi o-balea [thumbu]

"The woman burst the stomach"

3.3. Verbs with the suffixes [-l-] and [-w-]

The suffix [-l-] indicates a transitive verb while the suffix [-w-] appears with intransive verbs. The object arguments will be [+ ANIMATE] and[-ANIMATE] respectively:

a. (i). Vhanna vho-fhandula kholomo

"The men broke the cow"

(ii). Kholomo yo-fhanduwa

"The cow has broken"

b.

(i). Mutukana o-thukhula darata

"The boy cut the wire"

(ii). Darata yo-thukhuwa

"The wire has been cut"

c.

(i). Mme vho-kherula rokho

"The mother tore the dress"

(ii). Rokho yo-kheruwa

"The dress has torn"

d.

(i). Makhulu vho-tumula khuni

"The granny cut the wood"

(ii). Khuni yo-tumuwa

"The wood has been cut"

e. (i) Musidzana o-phamula khaphu

"The girl broke the cup"

(ii) Khaphu yo-phamuwa

"The cup has broken"

f. (i) Ńwana o-afhula khali

"The child split the claypot"

(ii) Khali yo-afhuwa

"The clay pot has split"

4. ARGUMENT STRUCTURE

In the treatment of the argument structure of the break verbs in Tshivenḓa, attention will firstly be given to the assignment of arguments and the selection restrictions on these arguments. After this the focus will be on inalienable possession and the instrument-subject alternation.

4.1. ASSIGNMENTS OF ARGUMENTS

The assignment of the arguments of the break verbs will be dealt with according to the syntactic classification in par.3 above:

4.1.1. Transitive verbs

Transitive verbs assign two arguments:

(1). [Musadzi] u-pwasha bodo

"The woman broke the pot"

In (1) above, the external argument is "musadzi" and the internal argument is "bodo"

4.1.2. Intransitive Verbs

These verbs assign only an external argument to the subject position:

(2). [Thaela] lo-balea

"The tyre burst"

In (2) above the external argument is "thaela"

4.1.3. Verbs with the suffix [-l-] and [-w-]

(See par.3.3 above for a list of these verbs). The assignment of arguments of these verbs will be explained with the aid of the verbs 'kherula' and 'kheruwa'

These verbs appear with a verbal root to which a suffix [-l-] or [-w-] is added, e.g. the verbal root –kheru- has a meaning which refers to some act of tearing something. This verbal root '-kheru-' assigns two internal arguments, i.e. agent and patient:

(1). [e] [-kheru-] [Agent, Patient]

(2). The verbal suffixes [-l-] or [-w-] have to appear with this root:

2.a. [-kheru-l-]

2.b. [-kheru-w-]

These verbal suffixes control the transitivity of the verb: the suffix [-l-] has a causative semantic feature. Both arguments above in (1) will then appear when this suffix is present. The agent argument in (1) will then have to be moved to the empty [e] subject position:

(3). [Agent$_i$ -kheru-l-t$_i$ Patient]

This movement is compulsory for the sake of case assignment. The subject argument in (1) above is empty and the agent NP which has now moved to this empty subject position in (3) above, will receive nominative case. The moved NP leaves behind a trace [t] with which it is coindexed. The remaining internal argument, i.e. the patient will then be assigned accusative case.

The suffix [-w-] controls the Agent argument with the result that only the patient argument will surface:

(4). [e] [-kheru-w$_i$ -[Agent$_i$,-Patient]

This control relation is indicated by coindexing with (i). The patient argument is then moved to the empty subject position to receive normative case:

(5). [Patient $_j$] [-kheru-w$_i$ -[Agent I $_i$, t$_j$]

The trace (t) which is left behind after this movement, is coindexed with [$_j$] in [5] above. The suffix [-w-] thus has an anti-causative semantic feature. These issues may be illustrated by the following sentences in Tshivenḓa:

(6). a. [e] – kheru –l- [musadzi, rokho]

b. [musadzi $_i$ [o-kherula [t$_i$, rokho]

(The woman tore the dress)

(7). a. [e] [-kheru-w$_i$ - [musadzi $_i$ rokho]

b. [Rokho $_i$ [yo- kheruwa [t$_i$]

(The dress is torn)

4.1.4. Iterative Suffixes

There are two interative suffixes i.e. an intransitive suffix with the form [-Vkan-] and a transitive suffix with the form [-Vkany-]. This suffix adds a repetitive or intensive meaning to the verb. The argument structure of these verbs follow the same derivation as with the suffixes [-l-] and [-w-] above:

a. (i). Musadzi o-pwashekanya bodo

"The woman broke the pot in many pieces"

(ii). Bodo yo-pwashekana

"The pot broke in many pieces"

b. (i). Munna o-fhandukanya khuni

"The man split the wood in many pieces"

(ii). Khuni dzo-fhandukana

"The wood split in many pieces"

c.(i). Maemu o-vundekanya thanda

" Maemu broke the stick in many pieces"

(ii). Thanda yo-vundekana

"The stick broke in many pieces"

d. (i). Munna o-thukhukanya darata

"The man broke the wire in many pieces"

(ii). Darata yo-thukhukana

" The wire broke in many pieces"

e. (i). Musidzana o-kherukanya rokho

" The girl tore the dress in many pieces"

(ii). Rokho yo-kherukana

" The dress has torn in many pieces"

f. (i). Mutukana o-tumukanya n̂ama

" The boy cut the meat in many pieces"

(ii). N̂ama yo-tumukana

"The meat was cut in many pieces"

g. (i). Malume vho-fhanzekanya khuni

" The uncle broke the wood in many pieces"

(ii). Khuni dzo-fhanzekana

" The wood broke in many pieces"

h. (i). Ńwana o-n̈watekanya vhuswa

" The child broke the porridge in many pieces"

(ii). Vhuswa ho-n̈watekana

" The porridge broke in many pieces"

i. (i). Makhulu vho-afhukanya khali

" The granny broke the claypot in many pieces"

(ii). Khali yo-afhukana

" The claypot broke in many pieces"

j. (i). Masindi o-thuthekanya nndu

" Masindi demolished the house in many portions"

(ii). Nndu yo-thuthekana

" The house was demolished in many pieces"

k. (i). Goloi yo-balekanya thaela

" The car burst the tyre in many pieces"

(ii). Thaela lo-balekana

" The tyre burst in many pieces"

4.2. SELECTION RESTRICTIONS

The selection restrictions on each of the arguments of the break verbs above will be dealt with separately.

ARG_1 is the external argument and ARG_2 is the internal argument. ARG_1 will sometimes be animate i.e. it must be a human or animal or it can be inanimate i.e. not alive. The external and internal will always appear in brackets:

4.2.1. Break Verbs

(pwasha, Vunda)

ARG_1 is the external argument and with the break verb 'pwasha' or' vunda' this argument will always be animate, i.e. it must be a human or animal as indicated in the sentences below where the animate external argument appears in brackets.

a. [Mme] vho-pwasha khali

" The mother broke the claypot"

b. [Musidzana] o-pwasha vhuhadzi

" The girl broke the marriage"

c. [Vhasadzi] vho-vunda mulanga

"The women broke the agreement"

d. [Munna] o-vunda mulayo

" The man broke the law"

e. [Kholomo] yo-pwasha fasitere

"The cow broke the window"

The selection restriction on ARG can be represented as follows;

ARG = Tshithu tshi-no- pwashea kana u vundea

(Something which is breakable)

In the examples below the internal arguments is represented by any object 'lufuno', 'mulanga' and 'mulayo' and is represented in brackets:

a. O-pwasha [khali]

" She broke the clay pot"

b. O-pwasha [vhuhadzi]

" She broke the marriage"

c. Vho-vunda [mulanga]

" They broke the agreement"

d. O-vunda mulayo

" He broke the law"

e. Yo-pwasha fasitere

" It broke the window"

4.2.2. Break easily, snap verbs

(thukhula/thukhuwa)

ARG_1 with the break verb thukhula will be [± ANIMATE]

a. [Munna] o-thukhula darata

"The man broke the wire"

b. Kholomo yo-ṱhukhula thambo

"The cow broke the bone"

c. [Mme] vho-ṱhukhula muḓali

" The mother broke the cotton thread"

d. [Mafhungo] o-ṱhukhula mbilu

" The news broke the heart"

e. [Makhulu] vho-ṱhukhula luambo

" The granny broke the talks"

f. [Ṅwana] o-ṱhukhula luarane

" The child broke the string"

The selection restriction on ARG_2 can be represented as follows:

ARG_2= Tshithu tshilapfu tshi-no-ṱhukhuwa zwi sa kondi (Something long that breaks easily)

In the example below the internal argument is represented by any object even 'luambo'

a. O-ṱhukhula [daraṱa]

" He broke the wire"

b. Yo-ṱhukhula [thambo]

" It broke the bone"

c. O-ṱhukhula [muḓali]

" He broke the cotton thread"

d. O-ṱhukhula [mbilu]

" It broke the heart"

e. O-thukhula [luambo]

" She broke the talks"

f. Ṅwana o-thukhula [luarane]

" The child broke the string"

4.2.3. Break off verbs

(tumula, phamula, khopha, ṅwata, afhula)

ARG with the break off verbs 'tumula', 'phamula', 'khopha', 'nwata' and 'afhula' wil be [± ANIMATE]

As indicated in the examples below:

a. [Musidzana] o-tumula mudali

" The girl broke off the visitor"

b. [Madi] o phamula foro/mugero

" The water broke the furrow"

c. [Isani] o- khopha mphwe

" Isani broke the Sugarcane"

d. [Musadzi] o-ṅwata vhuswa

" The woman broke the porridge"

e. [Ofhani] o-afhula khali

" Ofhani broke the claypot"

the selection restriction on ARG_2 can be represented as follows:

ARG= Tshithu tshi-no- tumuwa, phamuwa, khophea, ṅwatea kana u afhuwa tsha bva kha tshinwe tsha vha zwipiḓa (Something that break off, split off a piece, split or cut into pieces)

In the sentences below the internal argument is represented by any object even 'lufuno'

a. O-thutha [lufuno]

" She broke the love"

b. Yo-vunḓa [davhi]

" It broke the branch"

c. Isani o-khopha [mphwe]

" Isani broke the sugarcane"

d. Musadzi o-nwata [vhuswa]

" The woman broke the porridge"

e. Ofhani o-afhula [khali]

" Ofani broke the claypot"

4.2.4. Demolish Verbs

(Phunya, Thutha)

ARG_1 with the break verbs 'phunya' and 'thutha' will be [± ANIMATE] as in the examples below:

a. [Mvula] yo-thutha makolo

"The rain demolished the drawings"

b. [Kone] o-thutha vhuṱala

"Kone demolished the tracks"

c. [Itani] o-phunya guvha

"Itani demolished the mudwall"

d. [Vhanna] vho-phunya luvhondo

"The men demolished the wall"

The selection restriction on ARG_2 can be represented as follows:

ARG_2 = Tshithu tshi-no-phunyea kana u thuthea tsha wela fhasi (something which is pulled or knocked down e.g. a building)

The internal argument is represented by physical objects and appears in brackets in the examples below:

a. O-thutha [vhutala]

"She demolished the tracks"

b. Vho-thutha [nndu]

"They demolished the house"

c. O-phunya[guvha]

"He demolished the mudwall"

d. Vho-phunya [luvhondo]

"They demolished the wall"

e. Yo-thutha [makolo]

"It demolished the drawings"

4.2.5. Split, Crack Verbs

(fhandula/ fhanduwa, fhanza/ devha)

ARG_1 with the break verbs 'fhandula', 'fhanza' and 'devha' will be [± ANIMATE] as indicated in the sentences below and the external argument appears in brackets:

a. [Mutukana] o-fhandula tshiṋoni

"The boy broke the bird"

b. [Muya] wo-fhandula nndu

"The wind broke the house"

c. [Khotsi] vho-fhanza khuni

"The father broke the wood"

d. [Malume] vho-devha tombo

"The uncle broke the stone"

The selection restriction on ARG_2 can be represented as follows:

ARG_2 = Tshithu tshi-no- fhanduwa, fhanzea, devhea tsha bva zwipiḓa kana mitwe(something which is breakable, to break into pieces)

The internal argument is represented by physical objects and appears in brackets in the examples below:

a. O-fhadula [tshiṋoni]

"He broke the bird"

b. Wo-fhandula [muri]

"It broke the tree"

c. O-fhanza [khuni]

"He broke the wood"

d. Malume vho-devha [tombo]

"The uncle broke the stone"

4.2.6. Burst Verbs

(Balea)

ARG_1 with the break verb 'balea' : this argument will be [± ANIMATE] and in the sentences below the [± ANIMATE] external argument appears in brackets:

a. [Goloi] yo-balea thaila

"The car burst the tyre"

b. [Nwana] o-balea thumbu

"The child burst the stomach"

c. [Khuhu] yo-balea tshavhutungu

"The hen burst the gall bladder"

d. [Kone] o-balea tshilonda

"Kone burst the wound"

The selection restriction on ARG_2 can be represented as follows:

ARG_2= tshithu tshi-no- balea tsha bva zwipida (something which is breakable into pieces)

In the examples below the argument is represented by physical objects:

a. Yo-balea [thaila]

"It burst the tyre"

b. O-balea [thumbu]

"He burst the stomach"

c. Yo-balea [tshavhutungu]

"It burst the gall bladder"

d. O-balea [tshilonda]

"She burst the wound"

4.2.7. Tear Verbs

(kherula/ kheruwa)

ARG_1 with the break verb 'kherula' will be [± ANIMATE] as in the example below:

a. [Musidzana] o-kherula rokho

"The girl tore the dress"

b. [Kholomo] yo-kherula mulenzhe

"The cow tore the leg"

c. [Dokotela] o-kherula mulomo

"The doctor tore the mouth"

d. [Ṅwana] o-kherula bugu

"The child tore the book"

The selection restriction on ARG_2 can be represented as follows:

ARG_2 = Tshithu tshi-no- kheruwa

(something which is torn)

In the example below the internal argument is represented by physical objects:

a. O-kherula [rokho]

"She tore the dress"

b. Yo-kherula [mulenzhe]

"It tore the leg"

c. O-kherula [mulomo]

"He tore the mouth"

d. O-kherula [bugu]

"She tore the book"

4.3. POSSESSION ALTERNATION

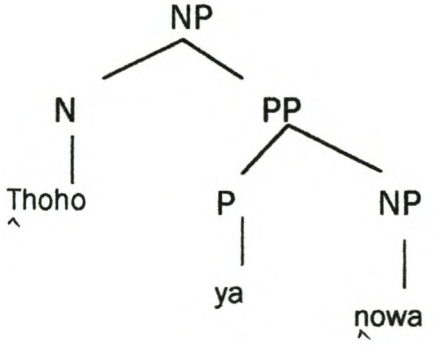
4.3.1. WITH TRANSITIVE VERBS

The possessor NP may move to a position next to the verb with the loss of the possessive [a]. The verb assigns an internal argument to the NP in the object position. e.g.

1.1. Mutukana o-pwasha [thoho ya nowa]

[Thoho ya nowa] is an object which is an internal argument. This internal argument is assigned by the verb '**pwasha**' (break).

The object argument [thoho ya nowa] is an NP and the head of this NP is a noun Thoho: a PP [ya nowa] is a modifier and the preposition ya is the head of PP. In the preposition ya there is a possessive a. The complement of the possessive a is the NP [Nowa]



Thoho (head) is the inalienable possession because it is the body part which cannot be detached from the body. Nowa (snake) is the possessor.

The possessor and the possession may alternate if the possessor Nowa (snake) moves from its original position and land next to the verb 'pwasha'. The possession thoho (head) then vacates its position and appears in the position which is after the possessor Nowa. The movement of possessor Nowa (snake) and possession thoho (head) to their respective new positions forces the possessive a to dissappear and the alternation may be observed as follows:

1.2. (a). Mutukana o-pwasha [thoho ya nowa]

"The boy broke the head of the snake"

(b). Mutukana o-pwasha [Nowa] [thoho]

"The boy broke the snake's head"

OTHER EXAMPLES:

1.3. (a). Dokotela o-vunda [lino la ṅwana]

"The doctor broke the tooth of the child"

(b). Dokotela o-vunda [ṅwana] [lino]

"The doctor broke the child's tooth"

1.4. (a). Mutukana o-khopha [lufhafha lwa tshiṋoni]

"The boy broke the wing of the bird"

(b). Mutukana o-khopha [tshiṋoni] [lufhafha]

"The boy broke the bird's wing"

1.5. (a). Malume vho-fhanza [mulenzhe wa mutukana]

"The uncle broke the leg of the boy"

(b). Malume vho-fhanza[mutukana] [mulenzhe]

"The uncle broke the boy's leg"

1.6. (a). Mme vho-devha [rambo la nguluvhe]

"The mother broke the bone of the pig"

(b). Mme vho-devha [nguluvhe] [rambo]

"The mother broke the pig's bone"

1.7. (a). Khuhu yo-ṅwata [tshilonda tsha ṅwana]

"The hen broke the wound of the child"

(b). Khuhu yo-ṅwata [ṅwana] [tshilonda]

"The hen broke the child's wound"

1.8. (a). Masindi o-fhandula [khana ya tshiṇoni]

"Masindi broke the chest of the bird"

(b). Masindi o-fhandula [tshiṇoni] [khana]

"Masindi broke the bird's chest"

1.9. (a). Ndo tumula [munwe wa Mundzhedzi]

"I cut the finger of Munzhedzi"

(b). Ndo tumula [Munzhedzi] [munwe]

"I cut Munzhedzi's finger"

1.10. (a). Ndidzulafhi o-thukhula [ndevhe ya musadzi]

"Ndidzulafhi broke the ear of the woman"

(b). Ndidzulafhi o-thukhula [musadzi] [ndevhe]

"Ndidzulafhi broke the woman's ear"

1.11. (a). Maemu o-afhula [shada la munna]

"Maemu broke the shoulder of the man"

(b). Maemu -afhula [munna] [shada]

"Maemu broke the man's shoulder"

1.12. (a). Vhatukana vho-phamula [thumbu ya tshidula]

"The boys broke the stomach of the frog"

(b). Vhatukana vho-phamula [tshidula] [thumbu]

"The boys broke the frog's stomach"

1.13. (a). Dokotela o-kherula [mbumbelo ya musadzi]

"The doctor tore the womb of the woman"

(b). Dokotela o-kherula [musadzi] [mbumbelo]

"The doctor tore the woman's womb"

1.14. (a). Mudededzi o-thutha [muhumbulo wa matshudeni]

"The teacher demolished the mind of the students"

(b). Mudededzi o-thutha [matshudeni] [muhumbulo]

"The teacher demolished the students' mind"

The alternation is possible because of the movement of the possessor from its original position to a position next to the verb and the possession may move from its position to the position which is after the possessor.

The inalienable possession alternation mainly occurs only with body parts. But if body part is extended to issue of clothes, inalienable possession may be applied:

1.15 (a). Ndo kherula [mulenzhe wa vhurukhu]

"I tore the leg of the trouser"

(b). Ndo kherula [vhurukhu] [mulenzhe]

"I tore the trouser's leg"

Concrete objects which may appear as possession could not bring about the inalienable possession alternation:

1.16. (a). Ndo pwasha [ngilasi ya mme]

"I broke the glass of the mother"

*(b). Ndo pwasha [mme] [ngilasi]

"I broke the mother's glass"

The above sentences (b) does not bring about the inalienable possession alternation because the possession ngilasi (glass) is a concrete object, not a body part which is

attached to the possessor mme (mother). Ngilasi (glass) can be taken away from its possessor. The above sentence (b) is meaningless, hence there is no inalienable alternation.

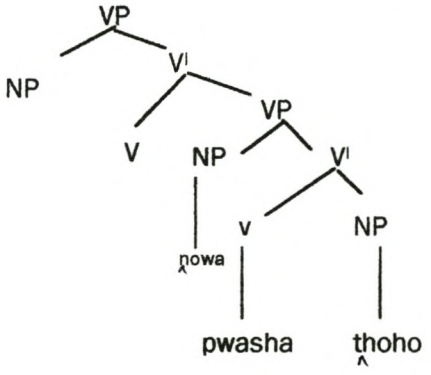
1.17. (a). Mutukana o-pwasha [nowa] [thoho]

"The boy broke the snake's head"

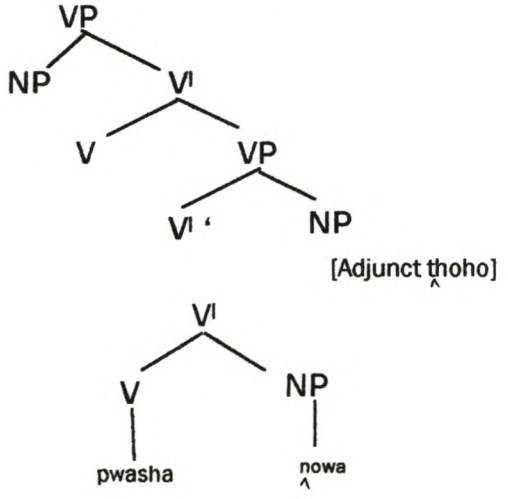
The possessor Nowa (snake) and possession thoho (head) may have the status of either complement or an adjunct.

If they are complements, they will appear in the following structure:

Fig 2



If thoho (head) is an adjunct it will appear in the following structure:



Two tests are to be conducted in order to prove whether the two NP_s are complements or not. If the tests succeed, the possession Thoho and possessor Nowa are complements but if the tests become unsuccessful, Thoho (head) will be an adjunct:

TEST 1 DO THE VERB ACCEPT AGRO?

1.18. Mutukana o-pwasha [Nowa] [Thoho]

"The boy broke the snake's head"

WITH AGRO

1.19. (a). O i-ṽ pwasha [thoho] [nowa]

b. O i-ṽpwasha [nowa] [thoho]

The objectival agreement i in sentence 1.19.(a) is coindexed with Nowa which indicates the relationship between AGRO i and possessor Nowa. The objectival agreement morpheme i in sentence 1.19.(b) is coindexed with the possession thoho to show the relationship between AGROi and thoho. Both possession and possessor are complements because the verb pwasha accepts AGRO of both NP_s. Note that thoho in sentence 1.19.(a) appears immediately after the verb pwasha. The possessor Nowa in sentence 1.19 (b) appears immediately after the verb pwasha.

OTHER EXAMPLES:

1.20. (a). Ndo mu-ṽ vunda [mulenzhe] [munna-ṽ]

(b). Ndo u-ṽ vunda [munna] [mulenzhe]

1.21. (a). Maemu o mu-ṽ thukhula [tshanda] [mutukana]

(b). Maemu o tshi-ṽ thukhula [mutukana] [tshanda]

1.22. (a). Munna o mu$_{i}$ afhula [shada] [musadzi]

(b). Munna o li$_{i}$ afhula [musadzi] [shada]

1.23. (a). Ndo mu$_{i}$ fhanza [mulenzhe] [musidzana]

(b). Ndo u $_{i}$fhanza [musidzana] [mulenzhe]

TEST 2 CAN THE NP MOVE TO THE SUBJECT IN PASSIVE?

1.24. (a). [e] v- w- NP NP

pwasha – w – Nowa Thoho

broken snake head

b. NP$_{i}$ v – w- NP [t$_{i}$] NP

Nowa $_{i}$yo – pwashwa [t$_{i}$] thoho

The snake's head has been broken

c. NP $_{i}$ v- w – NP [t$_{i}$]

Thoho$_{i}$yo – pwasha nowa [t$_{i}$]

If Nowa (snake) can be moved to [e] 1.24.(b) then Nowa can be accepted as complement. Nowa (snake) left the trace [t $_{i}$] behind to indicate the place from where it moved. Nowa and trace [t] are coindexed to signify the relationship. Thoho (head) is moved from its original position and appears in [e] in sentence 1.24(c). Thoho left the trace [t]. Thoho and trace [t] are coindexed to show the relationship. Thoho can be accepted as adjunct.

OTHER EXAMPLES:

1,25. a. [e] v – w- NP NP

-Vund-w- Ńwana lino

broken child tooth

b. NP v- w – [t] NP

[ńwana] o-vundwa [t] lino

'The child's tooth has been broken'

c. NP v- w - NP [t]

[Lino] lo-vundwa ńwana [t]

1.26. (a). [e] v – w - NP NP

-fhanz – w- mutukana mulenzhe

- broken boy leg

(b). [Np] v- w – [t] NP

[Mutukana] o-fhanzwa [t] mulenzhe

'The boy's leg has been broken'

(c). NP v – w - NP [t]

[Mulenzhe] wo-fhanzwa mutukana [t]

1.27. (a). [e] v-w- NP NP

- tumul – w - khuhu lufhafha

-cut hen wing

b. NP [t] v –w - [t] NP

[khuhu] yo-tumulwa [t] lufhafha

'The hen's wing has been broken'

(c). NP v- w – NP [t]

Lufhafha lwo tumulwa khuhu [t]

1.28. (a). [e] v- w- NP t NP

fhandul – w – musadzi thumbu

broken woman stomach

(b). NP v- w- NP NP

[Musadzi] o-fhandulwa [t] mbumbelo

'The woman's womb has been broken'

(c). NP v – w - NP [t]

mbumbelo yo-fhandulwa musadzi [t]

1.29 (a). [e] v – w - NP NP

thukhul – w - Ṅwana mukombo

cut child umbilical cord

(b). NP v – w – [t] NP

[ṅwana] o-thukhulwa [t] mukombo

'The child's umbilical cord has been broken'

(c). NP[i] v – w - NP [t[i]]

[Mukombo] wo – thukhulwa ṅwana [t[i]]

1.30. (a). [e] v – w - NP NP

- kherul – w - musidzana mulomo

- torn girl mouth

(b). NP[i] v – w - [t[i]] NP

[Musidzana[i]] o-kherulwa mulomo

'The girl's mouth has been torn'

(c). NP[i] v – w - NP [t[i]]

[mulomo[i]] wo kherulwa musidzana [t[i]]

1.31. (a). [e] v – w - NP NP

- afhul- w- mme shada

- broken mother shoulder

(b) NP[i] v – w - [t[i]] NP

[Mme[i]] vho-afhula shada

'The mother's shoulder has been broken'

(c). NP[i] v- w- NP [t[i]]

[mulomo[i]] wo-afhulwa mme [t[i]]

1.32. (a). [e] v – w - NP NP

-Ńwat – w - ṅwana tshilonda

- broken child wound

(b). NP v – w - [t] NP

[ṅwana] o-ṅwatwa [t] tshilonda

'The child's wound has been broken'

(c). NP v – w - NP [t]

[tshilonda] tsho-nwatwa nwana [t]

4.3.2. WITH INTRANSITIVE VERBS

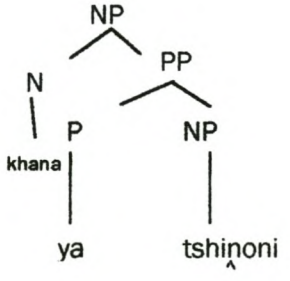
1. [Khana ya tshiṇoni] yo-fhanduwa

'The chest of the bird split'

[khana ya tshinoni] is the subject which is an-external argument. This external argument is assigned by the verb **fhanduwa**.

This subject [khana ya tshiṇoni] is an NP and the head of this NP is a noun **khana**. A PP [ya tshiṇoni] is a modifier and the preposition **ya** is the head of PP. In the preposition **ya** there is a possessive **a**. The complement of the possessive **a** is the NP **tshiṇoni** (bird).

[fig 1]



Khana (chest) is the inalienable possession because it is the body part which cannot be taken away from the body. Tshinoni is the possessor.

The possessor and the possession may alternate if the possessor tshinoni (bird) moves from its position and becomes a subject of the sentence. The possession khana (chest) moves to a position after the verb. The movement of these two NP_s (i.e. Possessor tshinoni and possession khana) to their new positions causes the possessive a to varnish, and the alternation may be noticed as follows:

2. (a). [khana ya tshinoni] yo-fhanduwa

"The chest of the bird split"

(b). [Tshinoni] tsho-fhanduwa [khana]

"The bird split the chest"

OTHER EXAMPLES:

3. (a). [vhili la goloi] lo-balea

"The tyre of the car burst"

(b). [Goloi] yo-balea [vhili]

"The car burst the tyre"

4. (a). [Nanga ya mbudzi] yo-thukhuwa

"The horn of the goat broke"

(b). [Mbudzi] yo-thukhuwa [nanga]

"The goat broke the horn"

5. (a). [mulomo wa ṅwana] wo-kheruwa

"The mouth of the child is tore"

(b). [ṅwana] o-kheruwa [mulomo]

"The child tore the mouth"

6. (a). [munwe wa musadzi] wo-tumuwa

"The finger of the woman broke"

(b). [musadzi] o-tumuwa [munwe]

"The woman broke the finger"

7. (a). [d̂amu l̂a musidzana] l̂o-phamuwa

"The breast of the girl burst"

(b). [Musidzana] o-phamuwa [d̂amu]

"The girl burst the breast"

8. a. [Mukonyi wa khaphu] wo-afhuwa

"The handle of the cup broke"

b. [khaphu] yo-afhuwa [mukonyi]

"The cup broke the handle"

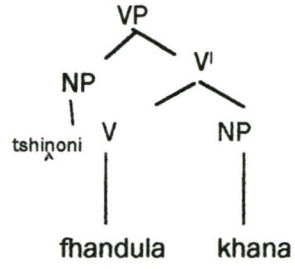
The movement of the possessor to occupy the subject position, and of the possession to appear after the verb makes the alternation to be possible.

9. a. [Tshin̂oni] tsho-fhanduwa [khana]

"The bird split the chest"

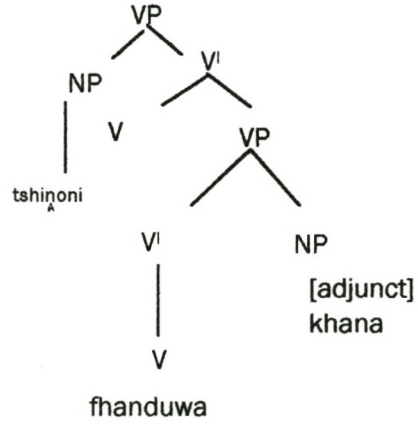
The possession khana (chest) which has moved to a position after the verb has the status of adjunct or complement. If it is a complement, it will appear in the following structure:

[fig 2]



If <u>khana</u> (chest) is an adjunct, it will appear in the following structure:

[fig 3]



TEST 1 DOES THE VERB ACCEPT AGRO?

10. [Tshiṋoni] tsho-fhanduwa [khana]

"The bird split the chest"

WITH AGRO

11. [Tshiṋoni] tsho i$_{i}$ fhanduwa khana$_{i}$

[Tshiṋoni i$_{i}$] AGRO i$_{i}$ fhanduwa khana

The **AGRO** is accepted by the verb in the operation of inalienable possession.

TEST 2 CAN THE NP MOVE TO THE SUBJECT IN PASSIVE CONSTRUCTION?

(a). [e] - fhandul - w - khana]

' Split' 'chest'

Khana (chest) may move to the empty subject position.

(b). [khana $_{\checkmark}$] o-fhandulwa [t $_{\checkmark}$]

A trace [t] is left behind to indicate the place from where khana moved. Khana (chest) and trace [t] are coindexed to indicate the relationship.

4.4. INSTRUMENT SUBJECT ALTERNATION

1. Maemu o-pwasha khali [nga lufo]

"Maemu broke the clay pot with the wooden spoon"

Nga denotes the instrument which is used, and that instrument is lufo (wooden spoon). Therefore lufo may not be assigned θ-role by the verb pwasha. It is assigned θ-role by the preposition nga because it is its complement. The verb -pwash- assigns θ-role to khali (claypot) only.

Many NP_s which may act as instrument characterized by nga are mostly concrete NP_s. The movement of an instrument that appears as a complement of the preposition nga to the subject position, emphasizes the operation of instrument subject alternation.

2. (a). Maemu o-pwasha [khali] [nga lufo]

"Maemu broke the clay pot with the wooden spoon"

Nga is a preposition. Lufo is a complement because of the presence of nga. At the same time nga assigns θ-role to lufo. The NP lufo has an interpretation of instrument. It may appear as the subject of the sentence.

(b). [Lufo] lwa-pwasha khali

"The wooden spoon broke the clay pot"

In the sentence above, lufo is the subject of the sentence, and it is still has the meaning of the instrument.

OTHER EXAMPLES:

3. (a). Mutukana o-fhandula tshiṋoni [nga lufhanga]

"The boy split the bird with the knife"

(b). [Lufhanga] lwo-fhandula tshiṋoni

"The knife split the bird"

4. (a). Isani o-vunḍa thanda [nga mbaḍo]

"Isani broke the stick with an axe"

(b). [Mbaḍo] yo-vunḍa thanda

"An axe broke the stick"

5. (a). Munna o-thukhula ḍarata [nga phuḷeiri]

"The plier cut the wire"

6. (a). Musidzana o-kherula rokho [nga tshigero]

"The girl tore the dress with the scissor"

(b). [Tshigero] tsho-kherula rokho

"The scissor tore the dress"

7. (a). Ngweṇa yo-tumula mukulo [nga maṇo]

"The crocodile cut the neck with the teeth"

(b). [Mano] o-tumula mukulo

"The teeth cut the neck"

8. (a). Ofhani o-phamula khaphu [nga tombo]

"Ofhani broke the cup with the stone"

8. (a). Ofhani o-phamula khaphu [nga tombo]
"Ofhani broke the cup with the stone"
(b). [Tombo] lo-phandula khaphu
"The stone broke the cup"

9. (a). Itani o-khopha mphwe [nga gona]
"Itani broke the sugarcane with the knee"
(b). [Gona] lo-khopha mphwe
"The knee broke the sugarcane"

10. (a). Kone o-ṅwata vhuswa [nga tshanda]
"Kone broke the porridge with the hand"
(b). [Tshanda] tsho-ṅwata vhuswa
"The hand broke the porridge"

11. (a). Vhatukana vho-phunya luvhondo [nga hamula]
"The boys demolished the wall with the hammer"
(b). [Hamula] yo-phunya luvhondo
"The hammer demolished the wall"

12. (a). Masindi o-afhula shada [nga muhwalo]
"Masindi broke the shoulder with the bundle"
(b). [Muhwalo] wo-afhula [shada]
"The bundle broke the shoulder"

13 (a). Ndidzulafhi o-devha thebvu [nga tombo]
"Ndidzulafhi broke the peanuts with the stone"
(b). [Tombo] lo-devha thebvu
"The stone broke the peanuts"

14. (a). Mme vho-fhanza khuni [nga mbado]

15. (a). Nthupheni o-thutha nndu [nga thanda]
" Nthupheni demolished the house with the stick"
(b). [Thanda] yo-thutha nndu
"The stick demolished the house"

5. EVENT STRUCTURE

The break verbs in Tshivenda have the following event structure:
[Event 1 = process: act of breaking, snapping, breaking easily, breaking off, demolishing, splitting, cracking, bursting and tearing.
[Event 2 = state]
The second event gives the result of the act of breaking, bursting, demolishing and tearing which is a state.

5.1. Break Verbs

(pwasha, vunda)

[Event 1 = process:act of breaking]
[Event 2 = state]
(a). Khali yo-pwashea ya vha [zwikengevheda]
"The clay pot broke into pieces"
(b). Thanda yo-vundea ya vha [zwipida]
"The stick broke into pieces"

5.2. Break easily or Snap verbs

(thukhula, thukhuwa)

(a). Darata yo-thukhuwa ya vha [zwipida]
"The wire broke into pieces"
(b). Thambo yo-thukhuwa yavha [zwipida]
"The rope broke into pieces"

5.3. Break off verbs

(tumula, phamula, khopha, ṅwata, afhula)

[Event 1 = process: act of breaking off]

[Event 2 = state]

(a). Nala yo-tumuwa ya vha [zwipiḓa]

"The nail broke into pieces"

(b). Khaphu yo-phamuwa ya vha[zwipiḓa]

"The cup broke into pieces"

(c). Mphwe yo-khophea ya vha [zwipiḓa]

"The sugarcane broke into pieces"

(d). Vhuswa ho-ṅwatea ha vha [matshakatshaka]

"The porridge broke into pieces"

(e). Khali yo-afhuwa ya vha [zwipiḓa]

"The claypot broke into pieces"

5.4. Demolish verbs

(phunya, thutha)

[Event 1 = process: act of demolishing]

[Event 2 = state]

(a). Guvha lo-phunyea lavha [zwipiḓa]

"The mud wall was demolished into pieces"

(b). Luvhondo lwo-thuthea lwa vha [zwipiḓa]

"The wall was demolished into pieces"

5.5. Split or crack verbs

(fhandula, fhanza, devha)

[Event 1 = process: act of splitting or cracking]

[Event 2 = state]

(a). Tshiṋoni tsho-fhanduwa tsha vha [zwipiḓa]

"The bird broke into two portions"

(b). Khuni yo-fhanzea ya vha [zwipiḓa]

"The wood broke into pieces'

(c). Nḍuhu yo-devhea ya vha [zwipiḍa]

"The peanuts broke into pieces"

5.6. Burst verbs

(balea)

[Events 1 = Process: act of bursting]

[Event 2 = State]

(a). Thaela lo- balea la vha [zwipiḍa]

"The tire burst into pieces"

5.7. Tear verbs

(kherula/ kheruwa)

[Event 1 = process:act of tearing]

[Event 2 = state]

(a). Bugu yo-kheruwa ya vha [zwipiḍa]

"The book torn into pieces"

(b). Mulomo wo- kheruwa wa [ṋembelela]

"The mouth torn and became loose hanging"

6. LEXICAL CONCEPTUAL PARADIGM (LCP)

Break verbs in Tshivenda have the following lexical conceptual paradigm (lcp)

6.1. Break verbs

(pwasha, vunda)

a. break: Musadzi o-pwasha khali
b. destroy: Musidzana o-pwasha vhukonani
c. fracture a body-part: O-vunda mulenzhe
d. transgress a law: Munna o-vunḍa mulayo
e. distress: Munna o-pwasha musadzi

6.2. Break easily or Snap verbs

(thukhula/ thukhuwa)

6.2. Break easily or Snap verbs

(thukhula/ thukhuwa)

a. break: Mutukana o thukhula darata
b. snap: Kholomo yo thukhula thambo
c. distress: Lufu lwo-thukhula mbilu
d. fracture a body part: Mampele ho-thukhula munwe

6.3. Break Off verbs

(tumula, tumuwa, phamula/phamuwa, khopha, ṅwata, afhula/ afhuwa)

a. break: Ṅwana o-phamula saga
b. split: Isani o-ṅwata vhuswa
c. cut: Munna o-tumula thambo

6.4. Demolish verbs

(phunya/ thutha)

a. demolish: Munna o-thutha vhutala
b. destroy: Musadzi o-thutha mudi

6.5. Split, crack verbs

(fhandula/ fhanduwa, fhanza, devha)

a. split: Mutukana o-fhandula tshinoni
b. destroy: Ṅwana o-devha thebvu
c. crack: O-fhandula khali
d. fracture a body part: Mme vho-fhandula mbilu ya kholomo
e. distress: Mafhungo o-fhandula mbilu
f. break: O-fhanza khuni

6.6. Burst verbs

(balea)

a. burst: Thaela lo-balea

6.7. Tear verbs

(kherula)

a. tear: Musidzana o-kherula thaula
b. fracture a body part: Dokotela o-kherula thumbu

7. LEXICAL INHERITANCE STRUCTURE

The break verbs all belong to the verb class which denotes a change of state.

6.8. Break verbs

(pwasha, vunda)

crash – break – change of state

6.9. Break easily or snap verbs

(thukhula/ thukhuwa)

Snap – break – change of state

6.10. Break off verbs

(tumula/ tumuwa, phamula / phamuwa, khopha, ṅwata, afhula/ afhuwa)

Cut – break- change of state

6.11. Demolish verbs

(phunya, thutha)

demolish – break – change of state

6.12. Split, crack verbs

(fhandula/ fhanduwa, fhanza, devha)

Split – Break – change of state.

6.13. Burst verbs

(balea)

Burst – break – change of state

6.14. Tear verbs

(kherula/ kheruwa)

Tear – break – change of state

CHAPTER 4

BEND VERBS

1. AIM

The purpose of this chapter is to explore the bend verbs in Tshivenda. Bend verbs in Tshivenda may be classified into five subgroups according to the meaning of the verbs.

The arguments and the selection restrictions of each verb will be treated separately. The event structure and the lexical inheritance structure will also be discussed.

The possession alternation with transitive verbs will also be explored. The operation of the instrument-subject alternation will be analysed. Lastly the ergative verbs which denote a change of state will also be investigated.

2. SEMANTIC CLASSIFICATION

Bend verbs in Tshivenda may be classified into five subgroups according to the meaning of the verbs and they are all transitive verbs:

1.4. Bend verbs

(khotha, govha, pi̯da, kombama, hovha, kotama, tshingama, sendama, peama)

Tshithu tshi no khothea, pi̯dea, govhea, kombama, hovhea, kotama, tshingama kana u peama zwi tshi itiswa ngau aluwa, muhwalo kana vhu̯tungu (any bendable physical object, something that is learnt against or inclined towards something or somebody or something that is bent due to pain, age or load).

(a). Mutukana o-khotha [dara̲ta̲]
"The boy bent the wire"

(b). Khotsi vho-govha [hă̤nara]
"The father bent the hanger"

(c). Maemu o-pi̲da [mulenzhe]
"Maemu bent the leg"

(d). Musidzana o-kombama [khundu]
"The girl bent the waist"

(e). Malume vho-hovha [khuni]
"The uncle bent the neck"

(f). Makhulu vho-kotama [muto̲do]
"The granny bent the back"

(g). Mukalaha o-tshingama [lurumbu]
"The old man bent the side"

(h). Masindi o-sendama [thoho]
"Masindi bent the head"

(i). Bigiri yo-peama [mukonyi]
"The beaker bent the handle"

1.5. Bend or twist verbs

(somba)

Tshithu tshi no-sombea zwi sa kondi (something that twist or bend easily, cause something to come or break off with a twisting movement)

(a). Musidzana o-somba [tshanda / thambo / mutsinga]
"The girl twisted the dress"

(b). Mukegulu o-somba [ṅwana]
"The old lady twisted the child"

(c). Mbudzi yo-somba [thambo]
"The goat twisted the rope"

(d). Mutshini wo-somba [munwe]
"The machine twisted the finger"

1.6. Bend or change verbs

(rovha)

Tshithu tshi no-rovhea, u nga vha murado wa muvhili, u pfuka mulayo kana ndangano.(Anything that can be bent, any physical object turn downward in a curve, to bend the rules, change or interpret the rules or laws in the way that suits oneself or the circumstances)

(a). Nwana o-rovha [tshanda]

"The child bent the hand"

(b). Mutukana o-rovha [mulayo]

"The boy bent the law"

(c). Vhasidzana vho-rovha [mulanga]

"The girls bent the an agreement"

1.7. Kneel verbs

(gwadama)

Tshithu tshi no-khothea kana u gwadama, tshi nga vha khuliso kana u rabela (Any physical object which can go down on one or both knees).

(a). Mufunzi o-gwadama nga [magona]

"The pastor knelt the knees"

(b). Musidzana o-gwadama nga [gona]

"The girl knelt the knee"

1.8. Bend or fold verbs

(peta, swota)

Tshithu tshi no-petea tsha vha na nyimele mbili kana nnzhi (something that is folded into two parts or more, bend or turn something so that one part of it lies on another, close or flatten something by pressing two parts of it together).

(a). Khotsi vho-peta [tshidulo]

"The father folded the chair"

(b). Nwana o-swota [bammbiri]

"The child crinkled the paper"

3. ARGUMENT STRUCTURE

In the treatment of the argument structure of the bend verbs in Tshivenda, attention will be given to the assignments of the arguments and the selection restrictions.

1.1. Assignments of Arguments

All bend verbs are transitive verbs and they assign two arguments:

1.1.1. Bend verbs

khotha, govha, pida, kombama, hovha, kotama, tshingama, sendama, peama

(a). [Mutukana] u-khotha [darata]

"The boy bends the wire"

In (a) above the external argument is "mutukana" and the internal argument is "darata"

(b). [khotsi] vha-govha [hanara]

"The fathere bends the hanger"

In (b) above the external argument is "khotsi" and the internal argument is "hanara"

(c). [Musidzana] o-peama [khundu]

"The girl bent the waist"

In (c) above the external argument is "musidzana" and the internal argument is "khundu"

(d). [Malume] vha-hovha [khuni]

"The uncle bends the firewood"

In (d) above the external argument is "malume" and the internal argument is "mutsinga"

(e). [Makhulu] vha-hovhama [mutodo]

"The granny bends the back"

In (e) above the external argument is "makhulu" and the internal argument is "mutodo"

f. [Mukalaha] u-tshingama [lurumbu]
"The old man bends the side"
In (f) above the external argument is "mukalaha" and the internal arg ument is "lurumbu"

g. [Munzhedzi] o-sendama [thoho]
"Munzhedzi bends the head"
In (g) above the external argument is "Munzhedzi" and the internal argument is "thoho"

h. [Bigiri] yo-peama [mukonyi]
"The beaker bent the handle"
In (h) above the external argument is "Bigiri" and the internal argument is "Mukonyi".

1.1.2. Bend or twist verbs

(somba)

a. [Musidzana] u-somba [thambo / mutsinga]
"The girl twist the bone"
In the (a) above the external argument is "Musidzana" and the internal argument is "thambo"

b. [Mukegulu] u-somba [nwana]
"The granny twist the child"
In (b) above the external argument is "Mukegulu" and the internal argument is "Nwana"

1.1.3. Bend or change verbs

(rovha)

a. [Nwana] o-rovha [tshanda]
"The child bent the hand"
In (a) above the external argument is "Nwana" and the Internal argument is "Tshanda"

b. [Mutukana] u-rovha [mulayo]
"The boy bends the law"
In (b) above the external argument is "Mutukana" and the internal argument is "Mulayo"

c. [Vhasadzi] vha-rovha [mulanga]
"The women bend the agreement"
In (c) above the external argument is "vhasadzi" and the internal argument is "Mulanga"

1.1.4. Kneel verbs

(gwadama)

a. [Mufunzi] u-gwadama [magona]
"The pastor bends the knees"
In (a) above the external argument is "Mufunzi" and the internal argument is "Magona"

b. [Musidzana] u-gwadama [gona]
"The girl bends the knee"
In (b) above the external argument is "Musidzana" and the internal argument is "gona"

1.1.5. Bend or fold verbs

(swoṱa, peta)

a. [Ṅwana] u-swoṱa [bammbiri]
"The child crinkled the paper"
In (a) above the external argument is "Ṅwana" and the internal argument is "bammbiri"

b. [Khotsi] vha-peta [tshidulo]
"The father bends the chair"
In (b) above the external argument is "Khotsi" and the internal argument is "Tshidulo"

1.2. SELECTION RESTRICTIONS

The selection restrictions on each of the arguments of the bend verbs above will be dealt with separately.

ARG_1 is the external argument and ARG_2 is the internal argument. ARG_1 will sometimes be animate i.e. it must be a human or animal or it can be inanimate i.e. not alive. The external and internal argument will always appear in brackets:

1.2.1. Bend verbs

1.2.1.1. Khotha

ARG_1 with bend verb 'khotha' will always be animate:

a. [Tshiṋoni] tsho-khotha mutsinga
   "The bird bent the neck"
b. [Kholomo] yo-khotha ṋanga
   "The cow bent the horn"
c. [Musidzana] o-khotha gona
   "The girl bent the knee"
d. [Mutukana] o-khotha ḏaraṱa
   "The boy bent the wire"
e. [Mukegulu] o-khotha gunwe
   "The old lady bent the thumb"

The selection restriction on ARG_2 can be represented as follows:

ARG_2 = Tshithu tshi-no khothea
(something which is bent)

In the example below the internal argument is represented by the physical or concrete objects:

a. Tsho-khotha [mutsinga]
   "It bent the neck"
b. Yo-khotha [ṋanga]
   'It bent the horn"

c. O-khotha [gona]
"She bent the knee"

d. O-khotha [gunwe]
"She bent the thumb"

e. Vho-khotha [darata]
"They bent the wire"

1.2.1.2. Govha

ARG_1 with the bend verb 'govha' will be [± animate]

a. [Mvula] yo-govha davhi
"The rain bent the branch"

b. [Musidzana] o-govha zwigina
"The girl bent the earrings"

c. [Mme] vho-govha bengele
"The mother bent the bangle"

d. [Tshidulo] tsho-govha rinngi
"The chair bent the ring"

The selection restriction on ARG_2 can be represented as follows:

ARG_2 = Tshithu tshi – no- govhea
(something that can be bent)

In the sentences below the internal argument is represented by a physical objects:

a. Yo-govha [davhi]
"It bent the branch"

b. O-govha [zwigina]
"She bent the earrings"

c. Tsho-govha [rinngi]
"It bent the ring"

1.2.1.3. Pida

ARG_1 with the bend verb 'pida' will be [± animate]

a. [Kholomo] yo-pida mulenzhe
"The cow bent the leg"

b. [Khuni] dzo-pida mutsinga
"The woods bent the neck"

c. [Muhwalo wo-pida tshanda
"The bundle bent the hand"

The selection restriction on ARG_2 can be represented as follows:

ARG_2 = Tshithu tshi-no- pidea
(something which is bent)

In the example below the internal argument is represented by the body parts and it is in brackets:

a. Yo-pida [mulenzhe]
"It bent the leg"

b. Dzo-pida [mutsinga]
"They bent the neck"

c. Wo-pida [tshanda]
"It bent the hand"

1.2.1.4. Kombama

ARG_1 with the bend verb 'kombama' will be [± animate] as indicated in the sentences below and the external argument appears in brackets:

a. [Muri] wo-kombama davhi
"The tree bent the branch"

b. [Musidzana] o-kombama khundu
'The girl bent the waist"

c. [Mukegulu] o-kombama mulomo
"The old lady bent the mouth"

The selection restriction on ARG_2 can represented as follows:

ARG_2 = Tshithu-tshi-no- kombama

(something which is bent, crooked or curved)

The internal argument is represented by physical objects and appears in brackets in the examples below:

a. Wo-kombama [davhi]
"It bent the branch"

b. O-kombama [khundu]
"She bent the waist"

1.2.1.5. Hovha

ARG_1 with the bend verb 'hovha' this argument will always be animate and in the sentences below the animate external argument appears in brackets:

a. [Musadzi] o-hovha khuni
"The woman bent the wood"

b. [Malume] vho-hovha mutsinga
"The uncle bent the neck"

c. [Nwana]o-hovha ndevhe
"The baby bent the ear"

The selection restriction on ARG_2 can be represented as follows:

ARG_2 = Tshithu tshi-no-hovhea

(something that is bendable)

In the examples below the argument is represented by body parts and physical objects. The internal argument is in brackets:

a. O-hovha [khuni]
"She bent the wood"

b. Vho-hovha [mutsinga]
"He bent the neck"

1.2.1.6. Kotama

ARG_1 with the bend verb 'kotama' will be [± animate] as in the examples below:

a. [Basigira] yo-kotama n̰anga
"The bicycle bent the handle"

b. [Muri] wo-kotama davhi
"The tree bent the branch"

c.. [Mutshudeni] o-kotama t̰hoho
"The student bent the head"

The selection restriction on ARG_2 can be represented as follows:

ARG_2 = Tshithu tshi-no- kotama

(something that is bent or crooked)

In the examples below the internal argument is represented by physical objects:

a. Yo-kotama [n̰anga]
"It bent the horn"

b. Wo-kotama [davhi]
"It bent the branch"

c. O-kotama [t̰hoho]
"She bent the head"

1.2.1.7. Tshingama

ARG_1 with the bend verb 'tshingama' this argument may be [± animate] as in the sentences below where we find ± animate external argument which appears in brackets:

a. [Muri] wo-tshingama davhi
"The tree bent the branch"

b. [Mukalaha] o-tshingama t̰hoho
"The old man bent the head"

c. [Musadzi] o-tshingama mulomo
"The woman bent the mouth"

The selection restriction on ARG_2 can be represented as follows:

ARG_2 = Tshithu tshi-no- tshingama

(something that is bent due to pain, age,or load)

In the example below the internal argument is represented by physical objects and body parts:

a. Wo-tshingama [davhi]
"It bent the branch"

b. O-tshingama [thoho]
"He bent the head"

1.2.1.8. Sendama

ARG_1 with the bend verb 'sandama' will always be animate:

a. [Matodzi] o-sendama thoho
"Matodzi bent the head"

The selection restriction on ARG_2 can be represented as follows:

ARG_2 = Tshithu tshi-no- sendama
(something that is learnt against)

In the example below the internal argument is represented by the body parts as it appears in brackets:

a. O-sendama [thoho]
"He bent the head"

1.2.1.9. Peama

ARG_1 with the bend verb 'peama' will be [± animate]

a. [Kholomo] yo-peama [nanga]
"The cow bent the horn"

b. [Goloi] yo-peama [mavhili]
"The car bent the tyre"

c. [Vothi] lo-peama [khono]
"The door bent the lock"

The selection restriction on ARG_2 can be represented as follows:

In the sentences below the internal argument is represented by physical objects and it appears in brackets:

a. Yo-peama [nanga]

"It bent the horn"

b. Yo-peama [mavhili]

"It bent the tyres"

1.2.2. Bend or twist verbs

(somba)

The ARG_1 with the bend verb 'somba' will always be animate as indicated in the sentences below and the animate external argument appears in brackets:

a. [Pfene] yo-somba tshibudzana

"The baboon twisted the goat"

b. [Khotsi] vho-somba mutsinga

"The father twisted the neck"

c. [Musidzana] o-somba ṅwana

"The girl twisted the child"

d. [Mmbwa] yo-somba munwe"

"The dog twisted the finger"

The selection restriction on ARG_2 can be represented as follows:

ARG_2 = Tshithu tshi-no- sombea

(something that is twisted or bent)

In the sentences below the internal argument is represented by physical objects:

a. Yo-somba [mbudzi]

"It twisted the goat"

b. O-somba [mutsinga]

"He twisted the neck"

c. O-somba [ṅwana]

"She twisted the child"

d. Yo-somba[muṅwe]

"It twisted the finger"

1.2.3. Bend or change verbs

(rovha)

ARG_1 with the bend verb 'rovha' is animate and in the sentences below the animate external argument appears in brackets:

a. [Ndou] yo-rovha davhi

"The elephant bent the branch"

b. [Ṅwana] o-rovha tshanda

"The child bent the hand"

The selection restriction on ARG_2 can be represented as follows:

ARG_2 = Tshithu tshi-no- rovhea

(something that can be bent)

In the examples below the internal argument is represented by any object, even'mulayo' and 'mulanga' and it is in brackets:

a. Yo-rovha [davhi]

"It bent the branch"

b. Ṅwana o-rovha [tshanda]

"The child bent the hand"

1.2.4. Kneel verbs

(gwadama)

The ARG_1 with the bend verb 'gwadama' will always be animate:

a. [Mufunzi] o-gwadama nga magona

"The pastor knelt the knees"

b. [Musidzana] o-gwadama gona
"The girl knelt the knee"

c. [Kholomo] yo-gwadama milenzhe
"The cow knelt the legs"

The selection restriction on ARG_2 can be represented as follows:

ARG_2 = Tshithitshi-no- gwadama
(something that is bent)

In the sentences below the internal argument is represented by body parts which are in brackets:

a. O-gwadama [magona]
"He knelt the knees"

b. O-gwadama [gona]
"She knelt the knee"

c. Yo-gwadama [mulenzhe]
"It knelt the leg"

1.2.5. Bend or fold verbs

(Peta, swoṱa)

ARG_1 with the bend verbs 'peta or swoṱa' will always be animate The animate external argument appears in brackets:

a. [Ñwana] o-swota bammbiri
"The child crinkled the paper"

b. [Ramaposwo] o-peta vhurifhi
"The postman folded the letter"

c. [Mmbwa] yo-peta mutshila
"The dog folded the tail"

d. [Nwana] o-peta bugu
"The child folded the book"

e. [Tshiṋoni] tsho-peta mafhafha
"The bird folded the wings"

The selection restriction on ARG_2 can be represented as follows:

ARG_2 = Tshithu tshi-no- petea kana u swoṱea (something that is folded or crinkled into two or more pieces)

In the sentences below the type of argument is represented by physical objects and the internal argument is represented in brackets:

a. O-swoṱa [bammbiri]
   "She crinkled the paper"

b. O-peta [vhurifhi]
   "He folded the letter""

c. Yo-peta [mutshila]
   "It folded the tail"

d. O-peta [bugu]
   "He folded the book"

e. Tsho-peta [mafhafha]
   "It folded the wings"

4. EVENT STRUCTURE

The bend verbs in Tshivenda have the following Event structure:

[Event 1 = process: act of bending, twisting and folding]

[Event 2 = state]

The second event gives the result of the act of bending, twisting or folding which is a state.

1.3. Bend verbs

(khotha, govha, piḓa, kombama, hovha, kotama, tshingama, sendama, peama)

1.3.1. [Event 1 = process: act of bending]

[Event 2 = state]

a. Ḓaraṱa yo-khothea ya vha [zwipiḓa]
   "The wire bent into pieces"

b. Hangara yo-khothea ya vha [zwipiḓa]
"The hanger bent into pieces"

c. Mutsinga wo-khothea wa vha [zwipiḓa]
"The neck bent into two parts"

1.3.2. Govha

[Event 1 = process: act of bending]

[Event 2 – state]

a. Zwigina zwo-govhea zwa vha [zwipiḓa]
"The earrings bent into pieces"

b. Bengele lo-govhea la vha [zwipiḓa]
"The bangle bent into pieces"

c. Davhi lo-govhea la vha [zwipiḓa]
"The branch bent into pieces"

1.3.3. Piḓa

[Event 1 = process: act of bending]

[Event 2 = state]

a. Mulenzhe wo-piḓea wa vha [zwipiḓa]
"The leg bent into two parts"

b. Mutsinga wo-piḓea wa vha [zwipiḓa]
"The neck bent into two portions"

c. Tshanda tsho-piḓea tsha vha [zwipiḓa]
"The hand bent into two parts"

1.3.4. Kombama

[Event 1 = process: act of bending]

[Event 2 = state]

a. Davhi lo-kombama la vha [zwipiḓa]
"The branch bent into pieces"

b. Khundu dzo-kombama dza vha [zwipiḓa]
"The waist bent into two parts"

1.3.5. Hovha

[Event 1 = process: act of bending]

[Event 2 = state]

a. Khuni yo-hovhea ya vha [zwipiḓa]

"The wood bent into pieces"

b. Mutsinga wo-hovhea wa vha [zwipiḓa]

"The neck bent into two parts"

c. Davhi ḽo-hovhea ḽa vha [zwipiḓa]

"The branch bent into portions"

1.3.6. Kotama

[Event 1 = process: act of bending]

[Event 2 = state]

a. Ṅanga yo-kotama ya vha [zwipiḓa]

"The handle bent into pieces"

b. Davhi ḽo-kotama ḽa vha [zwipiḓa]

"The branch bent into pieces"

1.3.7. Tshingama

[Event 1 = process: act of bending]

[Event 2 = state]

a. Davhi ḽo-tshingama ḽa vha zwipiḓa]

"The branch bent into two parts"

1.3.8. Ṱendama

[Event 1 = process : act of bending]

[Event 2 = state]

a. Ṱhoho yo-sendama ya vha [zwipiḓa]

"The head bent into two parts"

1.3.9. Peama

[Event 1 = process: act of bending]

[Event 2 = state]

a. Nanga lo-peama la vha [zwipida]

"The handle bent into two parts"

b. Mavhili o-peama avha [zwipida]

"The tyres bent into pieces"

c. Khono yo-peama ya vha [zwipida]

"The lock bent into pieces"

1.4. Bend or twist verbs

(Somba)

[Event 1 = process: act of twisting]

[Event 2 = state]

a. Rokho yo-sombea ya vha [zwipida]

"The dress twisted into pieces"

b. Munwe wo-sombea wa vha [zwipida]

"The finger twisted into two parts"

c. Tshanda tsho-sombea tsha vha [zwipida]

"The hand twisted into two parts"

1.5. Bend or change verbs

(rovha)

a. Davhi lo-rovhea la vha [zwipida]

"The branch bent into pieces"

b. Mulayo wo-rovhea wa vha [mulandu]

"The law broke into a crime"

c. Lwatsi lwo-rovhea lwa vha [zwipida]

"The grass bent into pieces"

1.6. Kneel verbs

(gwadama)

[Event 1= process: act of kneeling]

[Event 2 =state]

a. Magona o-gwadama a vha [zwipiḓa]

"The knees bent into two parts"

1.7. Bend or fold verbs

(peta, swota)

[Event 1 = process: act of folding]

[Event 2 = state]

a. Bammbiri lo-swotea ḽa vha [zwitshakatshaka]

"The paper crinkled into pieces"

b. Vhurifhi ho-petea ha vha [zwipiḓa]

"The letter folded into pieces"

c. Rokho yo-petea ya vha [zwipiḓa]

"The dress folded into pieces"

d. Tshidulo tsho-petea tsha vha [zwipiḓa]

"The chair folded into two parts"

The resulting state of the bent objects with all the bend verbs may be :

i. physical pieces: zwipiḓa, except with the bend verb 'rovha' which brings:

ii. a new state differ from the state which is the subject 'mulayo' (law) bent into 'mulandu' (crime)

5. POSSESSION ALTERNATION

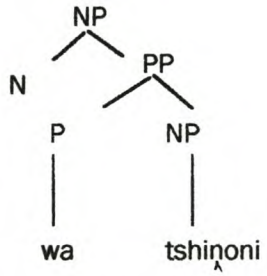
The verb assigns an internal argument to the NP in the object position e.g.

1.1 Mutukana o-khotha [mutsinga wa tshiṉoni]

[Mutsinga wa tshiṉoni] is an object which is an internal argument. This internal argument is assigned by verb 'khotha' (bend).

The object argument [mutsinga wa tshiṇoni] is an NP and the head of this NP is a noun 'Mutsinga', a PP [wa tshinoni] is a modifier and the preposition wa is the head of PP. In the preposition wa there is a possessive a . The complement of the possessive a is the NP [Tshiṇoni]

[fig 1]



Mutsinga (neck) is the inalienable possession because it is the body part whichcannot be detached from the body. 'Tshiṇoni' (bird) is the possessor.

The possessor and the possession may alternate if the possessor 'Tshiṇoni' (bird) moves from its original position and land next to the verb 'khotha' (bend). The possession 'mutsinga' (neck) then vacates its position and appears in the position which is after possessor 'Tshiṇoni' (bird). The movement of possessor 'Tshiṇoni' (bird) and possession 'mutsinga' (neck) to their respective new positions forces the possessive a to dissappear and the alternation may be observed as follows:

1.2. (a). Mutukana o-khotha [mutsinga wa tshiṇoni]
"The boy bent the neck of the bird"
(b). Mutukana o-khotha [Tshiṇoni] [mutsinga]
"The boy bent the bird's neck"

OTHER EXAMPLES:

1.3. (a). Khotsi vho-somba [tshanda tsha ṅwana]
"The father twisted the hand of the child"

(b). Khotsi vho-somba [nwana] [tshanda]
"The father twisted the child's hand"

1.4. (a). Mme vho-rovha [mulenzhe wa makhulu]
"The mother bent the leg of the granny"
(b). Mme vho-rovha [makhulu] [mulenzhe]
"The mother bent the granny's leg"

1.5. (a). Mutukana o-peta [mutshila wa mmbwa]
"The boy folded the tail of the dog"
(b). Mutukana o-peta [mmbwa] [mutshila]
"The boy folded the dog's tail"

1.6. (a). Nwana o-hovha [ndevhe ya mutukana]
"The child bent the ear of the boy"
(b). Nwana o-hovha [mutukana] [ndevhe]
"The child bent the boy's ear"

1.7. (a). Muhwalo wo-pida [mulenzhe wa mukalaha]
"The bundle bent the leg of the old man"
(b). Muhwalo wo-pida [mukalaha] [mulenzhe]
"The bundle bent the old man's leg"

The alternation is possible because of the movement of the possessor from its original position to a position next to the verb and the possession may move from its position to the position which is after the possessor.

The inalienable possession alternation mainly occurs with body parts. But if the body part is extended to issue of clothes, inalienable possession may be applied:

1.8. (a). Ndo peta [tshanḓa tsha rokho]
"I folded the hand of the dress"

(b). Ndo peta [rokho] [tshanda]

"I folded the dress's hand"

Concrete objects which may appear as possession could not bring about the inalienable possession alternation:

1.9. (a). Ndo-khotha [darata ya mme]

"I bent the wire of the mother"

(b). *Ndo-khotha [mme] [darata]

"I bent the mother's wire"

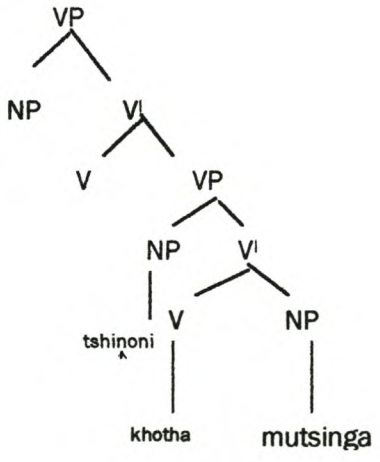
The above sentence (b) does not bring about the inalienable possession alternation because the possession 'darata' (wire) is a concrete object, not a body part which is attached to the possessor 'mme' (mother). 'Darata' (wire) can be taken away from its possessor. The above sentence (b) is meaningless, hence there is no inalienable possession alternation.

1.10. Mutukana o-khotha [tshinoni] [mutsinga]

"The boy bent the bird's neck"

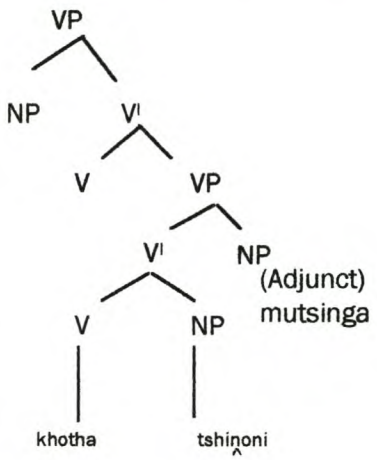
The possessor 'Tshinoni' and possession 'mutsinga' may have the status of either a complement or an adjunct. If they are complements, they will appear in the following structure:

[fig 2]



If mutsinga is an adjunct it will appear in the following structure:

[fig 3]



To prove whether the two NP_s are complements or not, tests are conducted. If the tests succeed, the possession 'mutsinga' and the possessor 'Tshinoni' are complements, but if the tests become unsuccessful, 'mutsinga' (neck) will be an adjunct.

TEST 1 DOES THE VERB ACCEPT AGRO?

1.11. Mutukana o-khotha [mmbwa] [mutshila]
"The boy bent the dog's tail"

WITH AGRO

1.12. (a). O i- khotha [mutshila] [mmbwa]
(b). O u- khotha [mmbwa] [mutshila]

The objectival agreement i in sentence 1.12.(a) is coindexed with 'mmbwa' which indicates the relationship between AGRO and possessor 'mmbwa'.The objectival agreement morpheme u in sentence 1.12.(b) is coindexed with the possession 'mutshila' to show the relationship between AGRO u and 'mutshila'. Both possession and possessor are complements because the verb 'khotha' accepts AGRO of both NP_s. Note that 'mutshila' in sentence 1.12.(a) appears immediately after the verb 'khotha'.The possessor 'mmbwa' in sentence 1.12 (b) appears immediately after the verb 'khotha'.

OTHER EXAMPLES:

1.13 (a). Ndo tshi i̯ somba [tshanda] [n̓wana]
(b). Ndo mu i̯ somba [n̓wana] [tshanda]

1.14. (a). O u i̯ rovha [mulenzhe] [mutukana]
(b)O mu i̯ rovha [mutukana] [mulenzhe]

1.15. (a). Vho u i̯ peta [mukulo] [makhulu]
(b). Vho vha i̯ peta [makhulu] [mukulo]

1.16. (a). O u i̯ hovha [mutsinga] [musidzana]
(b). O u i̯ hovha [musidzana] [mutsinga]

1.17. (a). Vho lu i̯ tshingama [lurumbu] [mukalaha]
(b). Vho mu i̯ tshingama [mukalaha] [lurumbu]

TEST 2 CAN THE NP MOVE TO THE SUBJECT IN PASSIVE?

1.18.	(a).	[e]	v – w-	NP	NP
			khoth- w-	tshinoni	mutsinga
			bent	bird	neck
	(b).	NP	v- w-	[t i̯]	NP

[Tshinoni i̯] tsho-khothwa [t i̯] mutsinga
"The bird's neck has been bent"

(c).	Npi	v –w-	NP	[t i̯]
	Mutsinga i̯	wo-khothwa		tshinoni [t i̯]

If 'Tshinoni' (bird) can be moved to [e] 1.18(B) then 'Tshinoni' (bird) can be accepted as complement. 'Tshinoni' (bird) left the trace [t i̯] behind to indicate the place from where it moved! Tshinoni and trace [t] are coindexed to signify the relationship. 'Mutsinga' (neck) is moved from its original position and appears in [e] in sentence

1.18(c). **'Mutsinga'** left the trace [t]. **'Mutsinga'** and trace [t] are coindexed to show the relationship. **'Mutsinga'** can be accepted as adjunct.

OTHER EXAMPLES:

1.19. (a). [e] v – w- NP NP
-somb-w- ṅwana ndevhe
-twist child ear

(b). NP$_{i}$ v – w- [t$_{i}$] NP
[Ṅwana$_{i}$] somba [t$_{i}$] ndevhe
"The child's ear has been twisted"

(c). NP$_{i}$ v – w- NP [t$_{i}$]
[Ndevhe] yo-sombwa ṅwana [t$_{i}$]

1.20. (a). [e] v – w- NP NP
-rovh –w makhulu gunwe
-bent granny thumb

(b). NP$_{i}$ v – w- [t$_{i}$] NP
[makhulu] vho-rovhwa [t$_{i}$] gunwe
"The granny's thumb has been bent"

(c). NP$_{i}$ v- w- NP [t$_{i}$]
[gunwe] lo-rovhwa makhulu [t$_{i}$]

1.21. (a). [e] v-w- NP NP
-pet-w- khuhu mulenzhe
-folded chicken leg

(b). NP$_{i}$ v-w- [t$_{i}$] NP
[khuhu$_{i}$] yo-petwa [t$_{i}$] mulenzhe
"The chicken's leg has been folded"

(c). NP$_{i}$ v-w- NP [t$_{i}$]
[mulenzhe] wo-petwa khuhu [t$_{i}$]

1.22. (a). [e] v-w- NP Np
-hovh-w- mukalaha mutoḓo
bent old man spinal cord

(b). NP v-w- [t] NP
[mukalaha] vho-hovhwa [t] muṱoḓo
"The old man's spinal cord has been bent"

(c). NP v-w- NP [t]
[Mutodo] wo-hovhwa makhulu [t]

1.23. (a). [e] v-w- NP NP
-tshingam-w- mukegulu lurumbu
-bent old woman the side

(b). NP v-w- [y] NP
[mukegulu]o-tshingamwa [t] lurumbu
"The old woman's side has been bent"

(c). NP v-w- NP [t]
[lurumbu] lwo-tshingamwa mukegulu [t]

6. INSTRUMENT SUBJECT ALTERNATION

1. Mutukana o-khotha ḓaraṱa [nga hamula]
"The boy bent the wire with the hammer"
Nga denotes the instrument which is used to bend the wire, that instrument is 'hamula' (hammer). Therefore 'hamula' may not be assigned θ-role by the verb 'khotha'.It is assigned θ-role by the preposition nga because it is its complement. The verb –khotha- assigns θ-role to 'hamula' (hammer) only.

Many NPs which may act as instrument characterized by nga are mostly concrete NPs. The movement of an instrument that appears as a complement of the preposition nga to the subject position, emphasizes the operation of instrument subject alternation.

2. (a). Mutukana o-khotha [ḓaraṱa] [nga hamula]
"The boy bent the wire with the hammer"

Nga is a preposition. '**Hamula**' (hammer) is a complement because of the presence of **nga**. At the same time nga assigns θ-role to **hamula**'. The NP **hamula** has an interpretation of instrument. It may appear as the subject of the sentence.

(b). [Hamula] yo-khotha ḓaraṱa
"The hammer bent the wire"

In the sentence above, 'hamula is the subject of the sentence, and it still has the meaning of the instrument.

OTHER EXAMPLES:

3. (a). Khotsi vho-govha hangara [nga phuḽeiri]
"The father bent the hanger with the plier"

(b). [Phuḽeiri] yo-govha hangara
"The plier bent the hanger"

4. (a). Ramaposwo o-peta vhurifhi [nga tshanḓa]
"The postman folded the letter with the hand"

(b). [Tshanḓa] tsho-peta vhurifhi
"The hand folded the letter"

5. (a). Musidzana o-rovha mutsinga [nga gokoko]
"The girl bent the neck with the tin"

(b). [Gokoko] ḽo-rovha mutsinga
"The tin bent the neck"

6. (a). Kholomo yo-hovha davhi [nga ṋanga]
"The cow bent the branch with the horn"

(b). [Ṋanga] yo-hovha davhi
"The horn bent the branch"

7. (a). Mme vho-somba mutsinga [nga muhwalo]
"The mother twisted the neck with the bundle"
(b). [Muhwalo] wo-somba mutsinga
"The bundle twisted the neck"

8. (a).Ńwana o-swoṱa bammbiri [nga tshanḓa]
"The child crinkled the paper with the hand"
(b). [Tshanḓa] tsho-somba bammbiri
"The hand crinkled the paper"

9. (a). Makhulu vho-tshingama tshanḓa [nga vhuṱungu]
"The granny bent the hand with the pain"
(b). [Vhuṱungu] ho-tshingamisa tshanḓa
"The pain bent the hand"

10. (a). Mukegulu vho-kotama ṱhoho [nga muhwalo]
"The old lady bent the head with the bundle"
(b). [Muhwalo] wo-kombamisa ṱhoho
"The bundle bent the head"

7. ERGATIVE VERBS

Ergative verbs in Tshivenda denote a change of state. They are characterized in terms of the property of assigning two internal theta roles i.e. they select two internal arguments of which one is agent and one is patient/ theme. Examples:

1. (a). Mutukana o-tshingama mulomo [O>Agr + O]
boy- Agr – Perf –bend mouth
'The boy bent the mouth'
(b). Mulomo wo-tshingama
mouth Agr – Perf bend
"The mouth is bent"

The verb –tshingam – in the above examples has two internal arguments.

OTHER EXAMPLES:

2. (a). Mutukana o-khotha munwe [O>Agr +O]
   boy Agr – Perf – bend finger
   "The boy bent the finger"
   (b). Munwe wo-khotha
   finger Agr – Perf – bend
   "The finger is bent"

3. (a). Musidzana o-somba tshanḓa [O>Agr +O]
   girl Agr – perf – bend hand
   "The girl bent the hand"
   (b). Tshanḓa tsho-somba
   hand Agr – Perf – bend
   "The hand is bent"

4. (a). Ṅwana o-rovha gona [O>Agr +O]
   child Agr –Perf- bend knee
   "The child bent the knee"
   (a). Gona lo-rovha
   knee Agr – Perf – bend
   "The knee is bent"

5. (a). Nḓou yo-peta musingo [yo>Agr +O]
   elephant Agr – Perf – bend trunk
   "An elephant bent the trunk"
   (b). Musingo wo-peta
   trunk Agr – Perf bend
   "The trunk is bent"

"The trunk is bent"

6. (a). Mufunzi o-gwadama magona[O>Agr +O]
   Pastor Agr –Perf- bend knees
   "The pastor bent the knees"
   (b). Magona o-gwadama
   knees Agr – Perf- bend
   "The knees are bent"

7. (a). Musidzana o-kombama khundu [O>Agr +O]
   girl Agr – Perf – bend waist
   "The girl bent the waist"
   (b). Khundu dzo-kombama
   waist Agr – Perf- bend
   "The waist is bent"

8. (a). Malume vho-hovha tshanḓa [O>Agr +O]
   Uncle Agr –Perf – bend hand
   "The uncle bent the hand"
   (b). Tshanḓa tsho-hovha
   hand Agr – Perf – bend
   "The hand is bent"

9. (a). Makhulu vho-kotama muṱana [O>Agr +O]
   Granny Agr – Perf- bend back
   "The granny bent the back"
   (b). Mṱana wo-kotama
   back Agr – Perf - bend
   "The back is bent"

10. (a). Bigiri yo-peama mukonyi [yo>Agr +O]
    beaker Agr – Perf – bend handle

"The beaker bent the handle"

(b). Mukonyi wo-peama

handle Agr –Perf – bend

"The handle is bent"

11. (a). Mukalaha o-sendama thoho [O>Agr +O]

old man Agr – Perf- bend head

"The old man bent the head"

(b). Thoho yo-sendama

head Agr –Perf-bend

"The head is bent"

The sentences above have the following derivation:

12. [NP] INFL [VP-tshingam – mutukana mulomo]

'bend' 'boy' 'mouth'

The internal agent argument, 'mutukana' (boy) may move to the subject position, driving the example in (1a). The remainning internal argument, the patient 'mulomo' (mouth) occurs as direct object of the verb –'tshingam'- (bend) and it is assigned accusative case by this verb. The internal patient argument, 'mulomo' (mouth) may move to the subject position deriving the example in (1b). The remaining internal agent argument, 'mutukana' (boy) is deleted since it may not occur in this construction.

The patient argument 'mulomo' (mouth) is not an external argument of the verb- 'tshingam'- since it is unable to occur as a de-externalised argument in passive verb constructions. This argument shows a similar behaviour to the subject argument of unaccusative verbs:

13. *Ho tshingam-w-a nga mulomo [Ho<Agr +O]

There –Perf bend –Pass by –mouth

'There was bent by the mouth'

in the examples of * (1b), while the examples of (1a) exhibit the transitive use of this verb. In lexical conceptual structure such verbs appear as complement of the semantic category CAUSE. The sentences in (1b) thus exhibit the inchoative interpretation while those in (1a) have the causative reading.

8. LEXICAL CONCEPTUAL PARADIGM

Bend verbs in Tshivenda have the following Lexical conceptual paradgim (LCP):

8.1. Bend verbs

(khotha, govha, pida, kombama, hovha, kotama, tshingama, sendama, peama)

Bend: Mutukana o-khotha darata

Kneel: Musidzana o-khotha gona

Curve: Mukegulu o-kombama mutana

Incline towards: Mufunzi o-kotama thoho

Lean against: Munna o-sendama thoho.

Fracture a body part: Ńwana o-pida mulenzhe

8.2. Twist verbs

(somba)

Wring: Ńwana o-somba rokho

Twist: Mbudzi yo-somba thambo

Bend: Mvula yo-somba davhi

Destroy: Mukegulu o-somba ńwana

Fracture a body part: Ndo somba munwe.

8.3. Change verbs

(rovha)

Bend: Musidzana o-rovha mutsinga

Transgress a law: Mutukana o-rovha mulayo

Fracture a body part: Maemu o-rovha tshanda

8.4. Kneel verbs

(gwadama)

Kneel: Mufunzi o-gwadama magona

Bend: Musidzana o-gwadama gona.

8.5. Fold verbs

(peta, swoṱa)

Fold: Mme vho-peta rokho

Crinkle: Nwana o-swota bammbiri

9. LEXICAL INHERITANCE STRUCTURE

All the bend verbs have this structure:

9.1. Bend verbs

(khotha, govha, piḓa, kombama, hovha, kotama, tshingama, sendama, peama)

e.g. Crook-Bend- change of state

Lean against-Bend -change of state

Incline towards- Bend -change of state

Curve- Bend - change of state

9.2. Twist verbs

(somba)

Twist-Bend-change of state

9.3. Change verbs

(rovha)

Turn- Bend- change of state

9.4. Kneel verbs

(gwadama)

Lean- Bend –change of state

9.5. Fold verbs

(peta, swoṭa)

Fold- Bend- change of state

Crinkle – Bend – change of state

CHAPTER 5

CONCLUSION

Break verbs in Tshivenda are classified into seven subgroups according to the meaning of the verb while the bend verb in Tshivenda are classified into five subgroups.

The main findings of chapters three and four demonstrate the differences between the lexical semantic-representation and the lexical syntactic representation of break and bend verbs.

The argument structure of both the break and bend verbs have been explored. In the treatment of the argument structure, attention is given to the assignments of the argument and the selection restrictions which these verbs impose on their arguments.

Chapter three deals with the break verbs where the assignments of arguments focus on the transitive and intransitive verbs. Transitive verbs assign two arguments i.e. the external and internal arguments. Intransitive verbs assign only an external argument to the subject position. The verbal suffixes [-l-] and [-w-] together with iterative suffixes [-Vkan-] and [-Vkany-] have also been explored in the case of the break verbs.

Chapter four deals with the bend verbs where we find that all bend verbs in Tshivenda are transitive verbs and they also assign two arguments. However, they have been found to be ergative verbs.

The event structure of both the break and bend verbs is treated separately. The possession alternation of the break and bend verbs in Venda has been investigated.

These chapters also explore the instrument subject alternation where two constructions are investigated i.e. the PP with "nga" as head and the locative NP which appears as adjuncts. The NP which appears as complement of nga has moved

to the subject position to emphasize the operation of the instrument subject alternation.

Chapter four of bend verbs shows that these verbs are ergative verbs which denote a change of state. They are characterized in terms of the property of assigning two internal arguments of which one is agent and one is patient/theme.

Lastly all the break and the bend verbs have been investigated with regard to the lexical conceptual paradigm and the lexical inheritance structure. They belong to the verb class which denotes a change of state.

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